
From: Smith, Monica
Sent: Saturday, September 2, 2017 1:21 PM
To: Smalley, Bryant; Restivo, Angela; R6HarveySITL
Subject: FW: Amended: Hurricane Harvey Management Report for Saturday, September 2, 2017 w/Attachments
Attachments: Harvey Management Report_9-2 Final.pdf; DHS Component Actions - Post-Tropical Cyclone HARVEY - East TX (0600 ET 2 Sep 2017).pdf; Senior Leadership Briefing -Post Tropical Cyclone Harvey -20170902_0500.pdf

From: Eoc, Epahq
Sent: Saturday, September 02, 2017 1:20 PM
Subject: Amended: Hurricane Harvey Management Report for Saturday, September 2, 2017 w/Attachments

Hello All, The attachments to the HQ EOC Management Report were missing from the original email transmission. They are included with this message. They include pdfs of the Management Report, the FEMA Senior Leadership Briefing, and the DHS Component Actions Report.

Tim Grier, Senior Watch Officer
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From: Eoc, Epahq
Sent: Saturday, September 02, 2017 2:09 PM
Subject: Hurricane Harvey Management Report for Saturday, September 2, 2017

Hello,

Attached and copied below, please find the HQ EOC Management Report for EPA's Response to Hurricane Harvey. The HQ EOC has been issuing this report daily since August 31. As response efforts change over time the issuance frequency may be amended.

If you have any questions, please contact the EOC Manager at 202-250-8903 or the Deputy EOC Manager 202-250-8904. Thank you.



For Internal Use Only/For Official Use Only
September 2, 2017 1030 ET
HURRICANE HARVEY MANAGEMENT REPORT

National Incident Management Objectives

- Objective 1:** Ensure that health and safety of the EPA response is considered at all times.
- Objective 2:** Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3:** Ensure prompt Review and Processing of Fuel Waiver requests.
- Objective 4:** Prepare for and provide Rapid Assessment of Industrial facilities as requested by the States or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with agencies in affected States, contact industrial sources within the impacted areas to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal areas.
- Objective 5:** Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support State agencies in contacting drinking water and waste water systems.
- Objective 6:** Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7:** Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8:** Encourage a collaborative federalism approach, where national state and local governments interact cooperatively and collectively to solve common problems.

Executive Summary

Hurricane Harvey made landfall at 2300 ET, August 26th, as a Category 4 storm near Rockport, Texas. Harvey was downgraded to a Category 1 with maximum sustained winds of 85 mph and located approximately 25 miles southwest of Victoria, TX by 0700 on August 27th and moving northwest at 6 mph. Harvey stalled over southeastern TX through the middle of the week. Due to the slow motion of Harvey and a prolonged period of onshore flow, water levels remain elevated. The impacted area received more than 50 inches of precipitation, and catastrophic flooding occurred. Harvey was eventually downgraded to a tropical storm with maximum sustained winds of 45 mph.

Rivers and bayous in southeast TX, particularly in the Beaumont and Port Arthur regions will likely remain in major to record flooding through next week with several crests not being reached until this weekend. Flooding will continue across much of the middle and upper TX coast into southwest LA for several weeks. Flash flood watches and warnings are in effect from parts of northern Mississippi and across western Tennessee, Kentucky, southern Indiana and southwest Ohio.

As of 1100 EDT on September 1st, the National Weather Service (NWS) reported Harvey was now a Post-Tropical Cyclone and located about 30 miles northwest of Nashville, TN and will have no more impacts to Texas. The forecast for the impacted areas and most of the state remains dry today. A few showers and storms are possible over North-Central Texas on September 2nd and again on September 3rd. By September 4th, the NWS predicts

increasing moisture near the coast that would lead to showers and a few storms. This activity looks to be a little more widespread near the coast on September 5th. A front will be moving into northern portions of the state on September 5th, bringing organized showers and storms with it by early September 6th.

Arkema Chemical:

Arkema Chemical Facility located in Crosby, TX, is a Risk Management Plan (RMP) facility. It manufactures liquid organic peroxides and two substances, sulfur dioxide (anhydrous) and 2-methylpropene are present at, or above the minimum threshold quantity for RMP applicability. There have been no accidental off-site releases of applicable RMP chemicals from the facility in the previous five years. Officials had warned that the plant could explode after its coolant system for the organic peroxide tanks and backup generators failed due to damage from Tropical Storm Harvey. Flooding prevented repairs from being made. Employees evacuated the facility on August 29th and an evacuation order was established for residents within a 1.5 mile-radius of the facility on August 30th.

On August 31st, at approximately 0345 ET, two incidents of trailer fires were reported at the Arkema facility. According to local responders and media, one of the eight refrigerated trailers on site auto-ignited and burned. As of 4:30pm on August 31st, Arkema management reported that three additional peroxide trailers were close to Self-Accelerating Decomposition Temperature (SADT) which is between 19 and 70 degrees Fahrenheit depending on the type of peroxide. Region 6 continues to work with the Interagency Modeling Atmospheric Assessment Center on modeling of anticipated future releases at the site. The modeling products are being delivered to Unified Command.

EPA has also identified a risk for a vessel of 38,000 pounds of Isobutylene that is close to the trailers of peroxide. The risk is radiant heat from burning peroxide could ignite the isobutylene. EPA deployed an On-Scene Coordinator (OSC) to the Unified Command post approximately four miles from the facility. Other EPA emergency response personnel in TX are in direct contact with first responders in Harris County and are providing federal assistance and resources.

On September 1st at approximately 1730 EDT, an additional trailer reacted resulting in a large fire with significant amounts of black smoke. During the fire EPA's ground air monitoring results outside of the exclusion zone were below levels of health concern. The fire subsided at approximately 1830 CDT. Unified Command determined that access to the facility is unsafe and a 1.5-mile evacuation radius would remain in effect until further notice.

EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft have been making multiple overflights of the Arkema facility. ASPECT has performed 5 overflights with no detections, with the exception for 2 detections of benzoyl peroxide at approximately 5 ppm which is just above the detection limit. Mobile ground air monitoring for pollutants of concern including VOCs, SO₂ and CO. ASPECT is currently conducting an overflight of the most recent fire on September 1st and will report additional data related to the plume.

Aerial reconnaissance photos indicated that flood waters within the facility have receded significantly. EPA collected surface water runoff samples downstream of the facility at 4 locations near a residential area. The samples are being analyzed by EPA's mobile laboratory and will continue to maintain a 24-hr presence with air monitoring capabilities. Unified Command at the Arkema site continues to coordinate with the EPA Region 6 Environmental Unit to determine locations on the site where flood water samples should be collected.

Harris County Office of Homeland Security and Emergency Management is conducting air monitoring in the area. The Harris County Fire Department is maintaining a 1.5-mile evacuation order around the facility. Poison Control

Centers are set up in TX to help citizens who have health concern questions concerning the Arkema facility or other flood-related health questions. Monitoring is being conducted at locations accessible given current flooding and exclusion zone. Four air monitoring teams from EPA, Harris County Pollution Control and Liberty County are conducting monitoring around the exclusion zone. So far, all readings are non-detect at ground levels.

Conoco Phillips Oil Spill:

On August 31st, The Conoco Phillips facility in Cuero, TX reported an oil spill consisting of 316 barrels due to Harvey. The spill has impacted Denton Creek. And an emergency response team is responding out of the Corpus Christi Incident Command Post.

Conoco Phillips indicated that they cannot drive to the facility. The Texas Railroad Commission and USCG drove as close to the facility as they could yesterday. No sheen of oil was observed, but the water flowed at a good pace. Waters are receding in the area and personnel will likely be able to access the facility to better assess the release and perform a response. **As of September 2nd, no additional assessment or response has been reported.** Conoco Phillips has updated their release totals to 385 barrels of oil and 76-barrel produced water since the tanks are on their side.

Oil Spills Reported September 2nd:

The Denbury Onshore LLC facility near Friendswood, TX reported an oil spill between 200 and 1,500 barrels of crude oil due to Harvey. Some of the fuel flowed into an underground storm drainage system that empties into tributaries of Cedar Creek. Most oil remained on company's property accord to Denbury Onshore LLC.

A second spill was reported by Linn Operating LLC and involved an unknown amount of oil from a battery of storage tanks in Montgomery County.

Disaster Declarations Issued:

- On August 25th, a major disaster declaration was issued for the state of TX for Hurricane Harvey.
 - An additional 14 counties were added on August 31st.
- On August 28th, an emergency declaration was issued for the state of Louisiana for Tropical Storm Harvey.
- On September 1st, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an Emergency Waiver Order for Texas and Louisiana. The Waiver is granted to support EPA in taking appropriate actions to prepare for, respond to, and recover from a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents resulting from Hurricane and Tropical Storm Harvey.

Region 6:

The Region 6 REOC is currently activated and is working under a limited Emergency Support Function (ESF) 10 FEMA Mission Assignment (MA). In addition, Region 6 has received an MA to assist the State of Texas with drinking water, wastewater, and Hazmat recovery operations. This MA for almost \$8.6 million added 184 EPA and Coast guard (CG) personnel to the Texas Commission on Environmental Quality (TCEQ) Harvey response in Corpus Christi, Houston, and surrounding impacted areas. An additional MA for \$20,000 has been issued to deploy EPA employees to various locations which include but are not limited to the Texas EOC and the Denton RRCC to support response operations.

Beaumont, TX:

As of 1000 CDT on September 1st, the City of Beaumont's surface water treatment plant (SWP) is producing 6-8 million gallons per day (MGD). No water is being sent to distribution as this time, but plant operators are currently attempting to pressurize lines from the plant to pump stations and storage facilities. Attempts to pressurize distribution will be made September 1st. The raw water pumps are not operational, and estimated to remain out of service for 2-3 weeks. Crews are currently on-site laying additional pipe and installing additional pumps.

On September 2nd, the City of Beaumont's water system anticipates being at half capacity, ten million gallons per day. The elevated storage tanks and groundwater tanks are mostly full and are currently valved-off until the system is brought back online. The City of Beaumont will be on a boil water notice when it goes on-line. The City has their Emergency Operations Center (EOC) fully functional and is coordinating efforts to make repairs and acquire chemicals and materials for both short-term and long-term. The groundwater plant remains offline due to flooding.

Regional Mission Assignments:

Mission Assignment Number	Funding Amount	Description of Assignment
MA4332DRTX3	\$8,592,000	R6 Field Ops incl. assessing drinking & waste water infrastructure, implementation of Response Manager tracking system, response to hazardous substances & oil discharges or releases.
MA4332DRTX1	\$20,000	Deployment of EPA to various locations, including but not limited to Texas EOC and the Denton RRCC to support response operations.
Total Funds	\$8,612,000	

Region 6 deployed 2 OSCs on August 25th. One OSC deployed to the FEMA Regional Response Center in Denton, Texas and the second OSC to the State of Texas Operations Center in Austin, Texas.

Region 6 has requested 4 OSCs from Region 2 to deploy to the Houston area. Four OSCs from the availability list have agreed to deploy September 1st, depending on the availability of flights. The REOC in Edison is coordinating logistics for this deployment.

Number of R6 Personnel Involved:

Personnel	EPA R6 Dallas, TX	FEMA Denton, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	Totals
R6	36	1	2	10	9	13	71
START	5			1	1	5	12
ERRS						6	6

Other Contractor	1						1
TOTAL	42	1	2	11	10	24	90

EPA Headquarters:

The HQ EOC activated at 0900 on August 28th and is at Level 1 operations in support of the Region 6 response to Tropical Storm Harvey. The HQ EOC is coordinating on several levels with Region 6 and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF #10 watch. EPA Senior Management that comprise the Policy Coordinating Committee (PCC) is in the process of developing senior management objectives that will form the basis of field strategy and tactics in response to Harvey.

Headquarters Mission Assignments:

Mission Assignment Number	Funding Amount	Description of Assignment
MA4332DRTX1	\$10,000	FEMA HQ ESF-10 Desk Support
4332DRTXEPA0200	\$40,000	FEMA HQ ESF-10 Desk Support
Total Funds	\$50,000	

Number of HQ Personnel Involved in the EOC:

Personnel	AO	OECA	OCSP	OGC	OEI	OLEM	OP	OW	Totals
Employees	1	1	1	1	1	12	1	1	19
Contractors					3	3			6
TOTAL	1	1	1	1	4	15	1	1	25

National Incident Management Team (N-IMAT):

EPA has activated the N-IMAT consisting of highly skilled response personnel from Regions 3, 4, and 5 to advise and assist R6 with response activities. Members of the N-IMAT arrived in Dallas on August 29th and are integrated into the Incident Management Team structure.

Criminal Investigation Division (CID):

EPA's Criminal Investigation Division (CID) is sending 25 special agents as a Quick Reaction Team (QRT) to south TX to support the response to Harvey. The response is managed as part of the MA under ESF-13. QRTs are deploying to provide law enforcement support, search and rescue operations, medical assistance teams and mortuary teams during the initial response to Harvey. As of September 2nd, the EPA CID QRT is enroute the to the affected area for at least 7 days with a possibility of extension.

State, Local and other Federal Agency Actions:

On August 30th, four National Incident Management Team members traveled to Corpus Christi to establish the Unified Command Center. EPA Region 6, TCEQ, Texas General Land Office (TGLO), and Coast Guard are

operating in Unified Command. On August 30th, the Unified Command will have seven teams in the field conducting reconnaissance. The teams will consist of personnel from Region 6, TCEQ, Civil Support Corps, and a CG strike team.

Other EPA Response Activities

EPA Laboratory/Analytical Services:

An EPA Trace Atmospheric Gas Analyzer (TAGA) vehicle is deployed to Corpus Christi. EPA's Portable High-Throughput Integrated Laboratory Identification System (PHILIS) units are en route from Denver to the Corpus Christi area and are anticipated to arrive on September 1st. The mobile laboratory will be used to process environmental samples.

On August 31st, EPA deployed four teams made up of On Scene Coordinators and contractors to Houston to coordinate with TCEQ, TGLO, and USCG and began responding to releases and spills at facilities. The teams will conduct rapid needs assessments, oil assessments, and hazards evaluations.

EPA is deploying four teams of On Scene Coordinators and contractors to Beaumont-Port Arthur to coordinate with TCEQ, TGLO, and US Coast Guard in responding to releases and spills at facilities. These teams will stage in Houston until weather allows them to enter the Beaumont-Port Arthur area.

On Saturday, September 2nd, EPA will send four additional Drinking Water/Wastewater Assessment Teams to Corpus Christi, and four Drinking Water/Wastewater Assessment Teams to Houston.

EPA's Houston laboratory is reporting that they will be closed until September 5th. The laboratory and office building are not damaged. Region 6 has back-up capabilities for laboratory services should the Houston facility remain closed. The mobile laboratory and response vehicles are secure and may be deployed when road conditions allow.

The EPA Regional Emergency Operations Center Liaison for the State of Louisiana, is reporting that the Louisiana Department of Environmental Quality (LDEQ) does not currently have any environmental emergencies resulting from the Hurricane Harvey rainfall. The LDEQ has not set up its IMT and does not plan to unless something significantly changes. LDEQ is making calls associated with some wastewater treatment plants in the area. EPA continues to monitor the situation in Louisiana and stay in close communication with LDEQ. As of Sept 2nd, the Louisiana State Emergency Operations Center (EOC) will no longer be fully activated. The main focus for Louisiana at this point is supporting individuals evacuating from impacted areas in Texas.

Quality Assurance Sampling Plans (QASP) for Surface Water Quality Monitoring:

Region 6 Environmental Unit is currently working on a number of sampling and analysis plans in preparation for future sampling tasks.

Industrial Sources:

Region 6 is working with TCEQ to contact industrial sources within the impacted area to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal area of TX. Exxon's oil refinery near Houston has reported suffered damage from Harvey.

On August 29th, TCEQ reported that Valero's Corpus Christi refinery had planned to begin start-up operations, running at 60% capacity until approximately September 3rd.

EPA is deploying four teams of OSCs and contractors to Beaumont-Port Arthur to coordinate with TCEQ, TGLO, and USCG in responding to releases and spills at facilities. These teams will stage in Houston until weather allows them to enter the Beaumont-Port Arthur area.

Drinking Water/Wastewater Assessments:

EPA continues to support TCEQ in contacting drinking water and waste water systems. EPA deployed 10 personnel to assist TCEQ's Drinking Water and Waste Water Phone Bank located in Austin, Texas on August 28th.

Beaumont Water Plant is not operational now, but staff are running a line to the Nueces River near the existing intake on a temporary basis so service can be restored. The groundwater plant remains off-line due to flooding. The surface water treatment plant (SWP) is producing 6-8 million gallons per day (MGD) as of September 1st. No water is being sent to distribution as this time, but plant operators are currently attempting to pressurize lines from the plant to pump stations and storage facilities. The elevated storage tanks and groundwater tanks are mostly full and are currently valved-off until the system is brought back online. The City of Beaumont will be on a boil water notice when it goes on-line.

EPA is working closely with the TCEQ to man a "call bank" to reach drinking water and waste water facilities to determine their needs and operational status. To date, TCEQ and EPA have determined that 61 drinking water systems are not functioning due to loss of power or damage from the storm. Another 58 drinking water systems are compromised and running on generator power. A total of 30 waste water systems are shut down. Boil water orders have been issued as appropriate. Army of Corp of Engineers is working to locate pumps for them. They will either truck or fly them in. The system is good on chemicals and they do have chlorine tanks but they are secure in a building that is not impacted. Also, the Texas State Operations Center (SOC) is working to begin on hauling water as soon as a route is determined.

Summary Information on System Status as Reported by TCEQ		
	Systems	Population
Boil Water Notices (BWN) In Place	166	264,431
Inoperable Public Water Systems	61	226,999
Inoperable Wastewater Treatment Systems	30	NA

Drinking Water Operational Status

Current Status: Operational status codes best describe the condition of the system at the time of the current assessment.

Status Code	Status Detail	Status Code Description	Number of Systems
OK	No problems	Normal power was never lost (or was restored before pressure loss) AND System never lost treatment.	1212

CLEAR	Lifted BWN due to neg. BacT samples. Normal operations resumed	BW lifted – negative BacT results. System has returned to normal operations, on grid power and with treatment. CLEAR code used when sampling has been used to lift BWN, otherwise OK code is used.	57
ENOK	On generator – never lost pressure	Currently operating on emergency power/generator but system never lost pressure and/or treatment (generator wear out/refueling concerns).	13
ENLP	On generator – lost pressure	Currently operating on emergency power/generator and system lost pressure and/or treatment before getting emergency power (contamination concerns).	10
P/LT	Lost pressure & or Treatment	System on grid power but has lost pressure and or treatment and has not been able to lift BWN.	54
SULTS	BacT sample results pending	System functional, flushed and BacT samples collected to clear BWN.	10
NOP	Not Operating	Contact made with system. System is offline & or unable to maintain required pressure and/or treatment.	44
SITE	Site visit needed	Contact attempted at least 3 times over 3 days by phone. Site visit to be conducted.	1
OUT	Out of Contact	Contact attempted by phone but system is unreachable; will call again.	21
STATUS	No Status Available	No Contact made.	2927
Total number of systems from 50 TX counties tracked in Response Manager system.			4512

Codes that result in Red & Yellow will require additional follow up (phone or site). Blue codes require a site visit.

Operational Definition: All drinking water served to customers is treated to National Primary Drinking Water Standards and is moving through all parts of the distribution system at or above required minimum pressure (20 psi or 35 psi for Harris County). The system is able to meet these requirements on a permanent basis in lieu of a temporary basis in response to the incident.

Water Notice (BWN): A BWN is required any time a system drops below 20 psi at any point in the distribution system. A 24-hour public notification is required and a system must take bacteriological samples once the minimum 20 psi can be consistently maintained. Bacteriological sample analysis must return an “absent” result indicating the sample is absent of bacteriological contamination.

Wastewater Operational Status

Current Status: Operational status codes best describe the condition of the system at the time of the current assessment.

Status Code	Status Detail	Status Code Description	Number of Systems
	No Problems	WWTP and Collection system fully operational and on grid power	428
Gen	WWTP and Collection on Generator	WWTP and/or Collection system is fully operational and on Generator Power or bypass pumps for lift stations (generator wear out/refueling concerns).	25
	WWTP and Collection Partially Operational SSO	WWTP and/or Collection system partially operational – Sanitary Sewer Overflow (SSO) in collection system (public health concerns).	16
Op	WWTP and Collection non-operational no SSO	WWTP and/or Collection system non-operational – No Sanitary Sewer Overflow.	29
	Site Visit Needed	Contact attempted at least 3 times over 3 days by phone. Site visit to be conducted.	1
	Out of Contact - phone eval only	Contact attempted by phone but system unreachable; will call again.	5
STATUS	No Status Available	No Contact made.	191
Total number of systems from 50 TX counties tracked in Response Manager system.			246

Note: Codes that result in Red & Yellow will require additional follow up (phone or site). Blue codes require a site visit.

Wastewater Operational Definition - All domestic wastewater collected, treated then discharged or land applied is permitted through the Texas Pollution Discharge Elimination System (30 TAC 305 rules) and discharges are required to meet the standards set by the Texas Surface Water Quality Standards and the Federal Clean

Water Act. The wastewater collection and treatment system is able to meet these requirements on a permanent basis in lieu of a temporary basis in response to the incident. This definition does not include "onsite wastewater treatments systems" regulated under 30 TAC 285.

Fuel Waivers:

EPA has waived requirements for reformulated gasoline and low volatility gasoline through September 15th in the following states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania, Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia; all Midwestern states located in PADD 2 - Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, Oklahoma, Tennessee, and Wisconsin; and all Gulf coast states located in PADD 3 – Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

Harvey Related Waiver Requests

State	Waiver Request	Date Received	Status Talking Point	Waiver Response
Low Vapor Pressure Requirements Waivers				
	Letter from TCEQ requesting a waiver of the RVP, RFG and TxLED standards in the Governor's Disaster Proclamation	8/25/17	Granted on 8/25/17	https://www.epa.gov/enforcement/eastern-coastal-texas-fuels-waiver
Georgia	Amended letter from Georgia Department of Natural Resources for Atlanta RVP to waive 7.8 RVP requirement to 11.5 RVP	8/29/17	Granted on 8/29/17	https://www.epa.gov/enforcement/louisiana-fuels-waiver
Louisiana	Letter from Louisiana governor requesting a waiver of the low RVP requirements.	8/28/17	Granted on 8/28/17	https://www.epa.gov/sites/production/files/2017/08/documents/louisianafuelswaiver082817
Texas	The state is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel.	8/31/17	N/A	N/A
Alabama	A statewide low RVP fuel waiver request was submitted and then the request was amended.	8/28/17	8/30/17	https://www.epa.gov/enforcement/second-state-fuels-waivers

State	Waiver Request	Date Received	Status Talking Point	Waiver Response
NRLM Diesel Fuel Waiver				
	Letter from Texas Comptroller requesting a waiver of using dyed NRLM diesel fuel in motor vehicles.	8/29/17	Granted on 8/29/17	https://www.epa.gov/enforcement/texas-diesel-fuel-waiver
Volatility Conventional Gasoline and Reformulated Gasoline (RFG)				
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania, Florida, Georgia, North Carolina, South Carolina, Virginia, West Virginia; all midwestern states located in Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Oklahoma, Tennessee, and Wisconsin; Gulf coast states located in PADD 3 – Louisiana, Arkansas, Mississippi, Texas, and Mexico, and Texas	Issuance of waivers based on requests for the allowance of regulated parties within the listed states to produce, sell, or distribute conventional winter gasoline (including BOBs) with an RVP of 11.5 psi before the addition of any ethanol in any RFG covered area. The waiver for El Paso, Texas goes until September 16 th due to their State Implementation Plan requirements.	8/30/17	Granted on 8/31/17	https://www.epa.gov/enforcement/second-state-fuels-waivers

***PADD: Petroleum Administration for Defense Districts**

Other EPA Response Actions:

Data Management: Two Data Team members have been deployed and are expected to arrive in Corpus Christi by September 1st. Region 6 will provide technical support to state regulatory agencies both at the GLO and TCEQ to gather data and information in Response Manager, a systemized response data management system.

Communications:

An EPA HQ Public Information Officer (PIO) is fully integrated into the Department of Homeland Security and FEMA communication structure and management, and participates in the daily National Incident Communication Conference Line (NICCL) call. As of September 1st, EPA activated the Crisis Communication Plan to ensure rapid response to providing coordinated, accurate, up-to-date information regarding its field activities. EPA's Public Information Office will be established in Dallas with forward field components as needed to support the HQ Office of Public Affairs.

EOC PIO is currently working with program offices and OPA to review and approve fact sheets on a variety of topics related to EPA's response activities. OPA plans to post the fact sheets to the response website as they get approved. Fact sheets prepared by OW and OLEM will be posted by August 31st. EOC PIO continues to work on review and approval of additional fact sheets provided by ORD, OCSPP and OAR / ORIA (Indoor Air Quality). We are also coordinating with FEMA / ESF-15 on external messaging and communications.

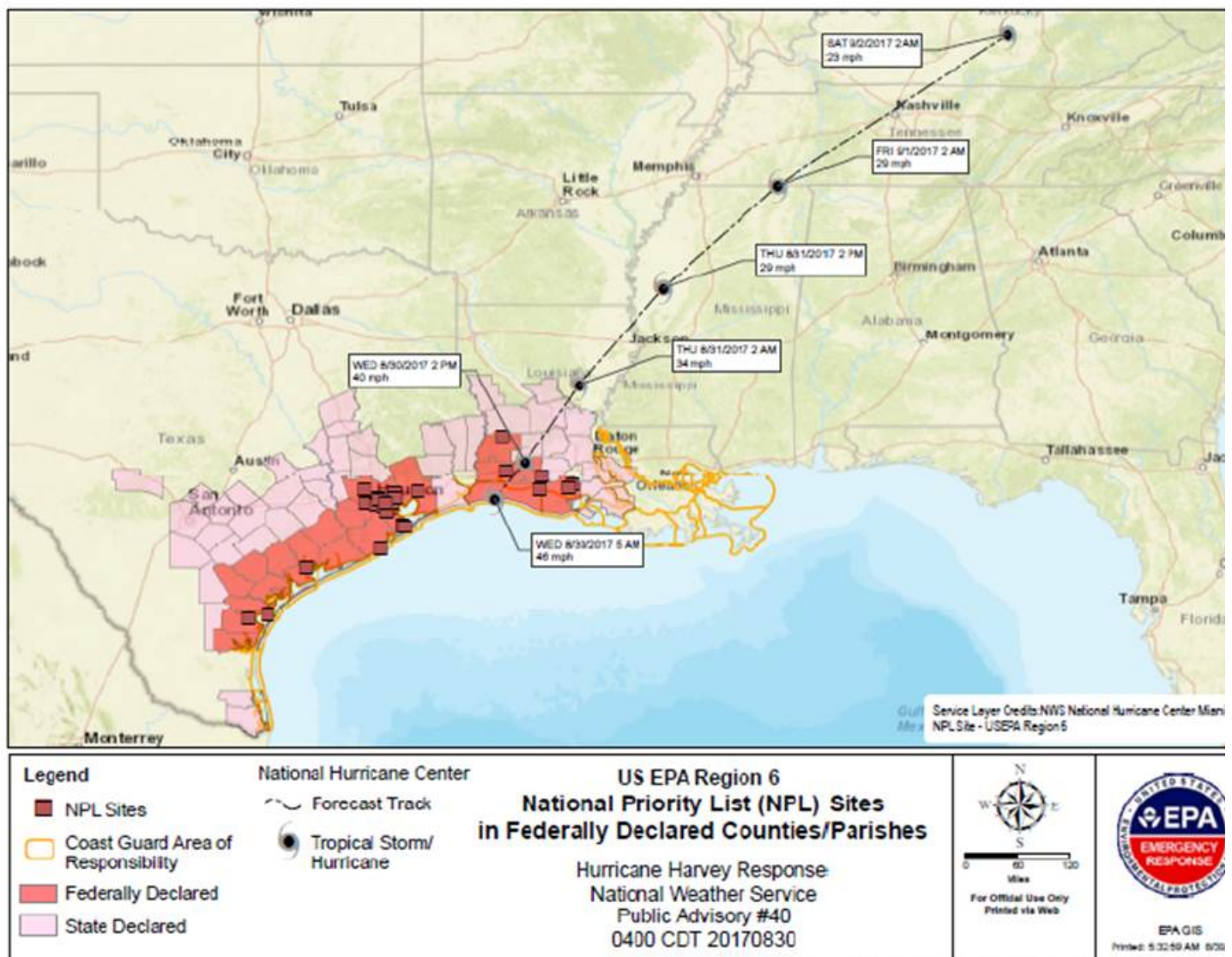
Under a FEMA MA, EPA deployed a Public Affairs Officer to the ESF-15 Joint Information Center in Austin. The EPA Public Information Unit in Dallas is fully operational and supported by a Public Information Assistance Team (PIAT). An EPA PIO is also in Corpus Christi to support operations at the ESF-10 Unified Command.

Superfund NPL Sites: EPA Remedial Managers will initiate follow-up activities at the 31 Superfund NPL sites within the storm path to conduct rapid damage assessments and determine if additional emergency cleanup activities are necessary.

Superfund Site Name	State	County	Status
American Creosote Deridder	LA	Beauregard	
Gulf State Utilities (North Ryan Street)	LA	Calcasieu	
Mallard Bay Landing Bulk Plant	LA	Cameron	
Sba Shipyard	LA	Jefferson Davis	
Pab Oil & Chemical Service	LA	Vermilion	
Gulf Coast Vacuum Services	LA	Vermilion	
D.L. Mud, Inc.	LA	Vermilion	
Gulfco Marine Maintenance	TX	Brazoria	
Alcoa (Point Comfort) / Lavaca Bay	TX	Calhoun	
Tex-Tin Corp.	TX	Galveston	
Motco, Inc.	TX	Galveston	
Malone Services Company	TX	Galveston	
Sikes Disposal Pits	TX	Harris	
French, Ltd.	TX	Harris	
Highlands Acid Pit	TX	Harris	
North Cavalcade Street	TX	Harris	
South Cavalcade Street	TX	Harris	
Crystal Chemical Co.	TX	Harris	
Sol Lynn / Industrial Transformers	TX	Harris	
Geneva Industries / Fuhrmann Energy	TX	Harris	
Harris (Farley Street)	TX	Harris	
Brio Refining Inc.	TX	Harris	
Dixie Oil Processors Inc.	TX	Harris	
Many Diversified Interests, Inc	TX	Harris	
Patrick Bayou	TX	Harris	

Superfund Site Name	State	County	Status
Jones Road Groundwater Plume	TX	Harris	
San Jacinto River Waste Pits	TX	Harris	
Us Oil Recovery	TX	Harris	
Petro-Chemical Systems, Inc. (Turtle Bayou)	TX	Liberty	
Brine Service Co.	TX	Nueces	Inspected on 8/30/17. No offsite release or onsite damage.
Falcon Refinery	TX	San Patricio	Inspected on 8/30/17. No offsite release or onsite damage.

Superfund National Priority List (NPL) Sites in Federally Declared Counties



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DHS Component Actions
POST-TROPICAL CYCLONE HARVEY – East Texas
0600 ET 2 SEP 2017
(Updates in blue)

Overview

- The remnants of Harvey will move northeast through portions of the Northeast and Mid-Atlantic on Saturday. There could be some localized flash flooding and isolated tornadoes, however no widespread significant impacts expected. Long-duration flooding will significantly hamper response and recovery activities with chances for additional showers and thunderstorms in the area Sunday thru Tuesday.
- Rescue operations are ongoing but requests for rescue are significantly lower than earlier in the incident. The city of Houston is coordinating with FEMA to begin the recovery process, including damage assessment, debris removal, and registration of impacted residents for disaster assistance.

Component Actions

Federal Emergency Management Agency (FEMA)

- The FEMA Administrator appointed Mr. Kevin Hannes and Mr. William Doran as the Federal Coordinating Officers for the states of Texas and Louisiana, respectively.
- As of 1700 EDT Sep 1, FEMA reported over 3,876 employees deployed.
- DHS Surge Capacity Force Deployment Status:

Component	Deployed	Requested	Available
CBP	66	3	724
USCG	28	0	616
DHS HQ	45	4	733
FLETC	27	0	36
ICE	25	3	109
TSA	233	3	1,827
USSS	10	0	18
USCIS	161	0	1,526
TOTAL	595	13	5,589

- Surge staffing continues for FEMA Strategic Workforce Augmentation Team (SWAT) for taking calls from three National Processing Service Centers, FEMA pop-ups, FEMA HQ, all FEMA Regions, and from home. 1,593 staff projected to be online with capacity for 24,263 calls.
- There have been over 63,000 National Flood Insurance Program claims.

- First mobile Disaster Recovery Center opened Sep 1 in Edna, Texas, located between Houston and Victoria.
- 1,482 (+432) housing inspectors are in the field.
- FEMA USAR teams have rescued over 5,985 (+1,430) individuals and 206 (+3) pets.

Customs and Border Protection (CBP)

- 55 (-2) personnel displaced.
- 483 air rescues and 877 (+843) marine rescues.
- 13 helicopters engaged in SAR missions; 4 aircraft in transport and communication missions.
- 215 Special Border Patrol Agents deployed for SAR missions.

Immigration and Customs Enforcement (ICE)

- 22 displaced personnel from the Houston office.
- Houston offices are closed until at least Sep 5.
- San Antonio offices are fully operational.
- Corpus Christi, Galveston, and Beaumont report no damage to facilities.
- Austin offices have resumed normal operations.
- A total of 203 ICE personnel are deployed and 44 are on standby awaiting mission assignment.
- 8 Rapid Response Teams (RRTs), with a total of 118 personnel, have deployed to Texas.

Transportation Security Administration (TSA)

- 64 (+1) displaced personnel.
- 157 personnel deployed to support ESF 13.
- Area airports:
 - Houston Intercontinental – open
 - Houston Hobby – open for domestic passenger flights; international arrivals expected to resume on Monday, Sep 4
 - Victoria – open
 - Corpus Christi – open
 - Beaumont – closed
 - New Orleans – open

U.S. Citizenship and Immigration Services (USCIS)

- 5 displaced personnel.
- Deploying a Disaster Assistance Team with GSA to assess facilities in Houston.
- Houston: All offices will resume operations at 0800 local time on Sep 5 with contract staff. USCIS will be able to provide basic services (e.g., collection of fingerprints, photos, signatures, etc.). Houston offices will not be at full-service until all USCIS staff are able to return for duty.
- San Antonio, Austin, and Harlingen offices resumed normal operations.

U.S. Coast Guard (USCG)

- 1,397 displaced USCG personnel and dependents.
- USCG has rescued/assisted 10,953 (+335) people and 1,379 (+155) pets.
- Facility Status:

- Station Port O'Connor has boat mooring damage and is without power.
 - Station Aransas' boat house is destroyed and is without power.
 - Station Galveston's dock is under water.
 - Station Freeport: on emergency generator.
 - Station Houston is partial mission capable.
 - Air Station Houston is partial mission capable-half the runway is useable.
- Restricted Seaports (TX and LA): Beaumont, Victoria, Port Arthur, Lake Charles, Corpus Christi, Texas City, Freeport, Galveston, and Houston.
- Operations:
 - 1,136 (-333) USCG personnel are deployed to the region above normal staffing.
 - 5 mobile communication units deployed.
 - 28 helicopters, 25 shallow water boats, 6 ice skiffs, and 4 airboats, are conducting search and rescue operations in Houston.
 - 7 helicopters, 29 shallow water boats, and 6 airboats are conducting search and rescue operations in Port Arthur.
 - 8 C-144s and 1 C-130 are delivering food, water, and supplies, to Ellington Field.
 - Cutter FORWARD underway in the vicinity of Port Arthur for offshore SAR coverage. Cutter BARBARA MABRITY en route Galveston with supplies.
 - One team conducting port damage assessments.

U.S. Secret Service (USSS)

- 6 displaced personnel.
- No new information to report.

National Protection and Programs Directorate (NPPD)

- 22 displaced personnel.
- IP is hosting calls with Private Sector Critical Infrastructure Stakeholders (325 participants on Sep 1 call).
- The Federal Protective Service (FPS) deployed 77 personnel to support operations in the affected areas. FPS is assessing the damage to federal facilities as well as to protecting and securing the buildings and sensitive government materials in the facilities, as well as assisting the Social Security Administration (SSA) in protecting two SSA distribution points in two shelters within Houston.

Domestic Nuclear Detection Office (DNDO)

- No DNDO personnel are displaced.
- All Mobile Detection Deployment Units are available to support operations as required.

Office of Legislative Affairs (OLA)

- Ongoing TX/LA delegation as well as House/Senate Leadership, HSGAC, CHS and Appropriations Committees outreach is the focus of DHS OLA effort. We are in constant and continuous coordination with FEMA and WH Leg Affairs in this effort. FEMA and OLA continue to encourage members to dial into the Congressional calls at 1500 EDT daily, where the experts are on the FEMA dial in from across the interagency.
- OLA continues tracking and coordinating flights for Members of Congress.
- Daily 1500 EDT (Sep 1) congressional call with members of the Texas delegation included:

- Rep. Gene Green
- Rep. Flores
- Rep. Poe's office
- Rep. Farenthold's office
- Rep. Vela's office
- Rep. Burgess
- Constant and continuous coordination with FEMA and White House Legislative Affairs.

Science and Technology Directorate (S&T)

- S&T's Flood APEX program team has partnered with Pacific Northwest National Laboratory to analyze flood impacts on 100 critical infrastructure sites for NPPD\OCIA. They are also working with MIT to fulfill a request from US Search and Rescue for an update to the NICS iPhone app for use by teams deploying for Hurricane Harvey.



For Internal Use Only/For Official Use Only

September 2, 2017 1030 ET

HURRICANE HARVEY MANAGEMENT REPORT

Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources. The Senior Leadership Briefing and DHS Component Actions Reports are attached.

National Incident Management Objectives

- Objective 1: Ensure that health and safety of the EPA response is considered at all times.
- Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3: Ensure prompt Review and Processing of Fuel Waiver requests.
- Objective 4: Prepare for and provide Rapid Assessment of Industrial facilities as requested by the States or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with agencies in affected States, contact industrial sources within the impacted areas to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal areas.
- Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support State agencies in contacting drinking water and waste water systems.
- Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8: Encourage a collaborative federalism approach, where national state and local governments interact cooperatively and collectively to solve common problems.

Executive Summary

Hurricane Harvey made landfall at 2300 ET, August 26th, as a Category 4 storm near Rockport, Texas. Harvey was downgraded to a Category 1 with maximum sustained winds of 85 mph and located approximately 25 miles southwest of Victoria, TX by 0700 on August 27th and moving northwest at 6 mph. Harvey stalled over southeastern TX through the middle of the week. Due to the slow motion of Harvey and a prolonged period of onshore flow, water levels remain elevated. The impacted area received more than 50 inches of precipitation, and catastrophic flooding occurred. Harvey was eventually downgraded to a tropical storm with maximum sustained winds of 45 mph.

Rivers and bayous in southeast TX, particularly in the Beaumont and Port Arthur regions will likely remain in major to record flooding through next week with several crests not being reached until this weekend. Flooding will continue across much of the middle and upper TX coast into southwest LA for several weeks. Flash flood watches and warnings are in effect from parts of northern Mississippi and across western Tennessee, Kentucky, southern Indiana and southwest Ohio.

As of 1100 EDT on September 1st, the National Weather Service (NWS) reported Harvey was now a Post-Tropical Cyclone and located about 30 miles northwest of Nashville, TN and will have no more impacts to Texas. The forecast for the impacted areas and most of the state remains dry today. A few showers and storms are possible over North-Central Texas on September 2nd and again on September 3rd. By September 4th, the NWS predicts increasing moisture near the coast that would lead to showers and a few storms. This activity looks to be a little more widespread near the coast on September 5th. A front will be moving into northern portions of the state on September 5th, bringing organized showers and storms with it by early September 6th.

Arkema Chemical:

Arkema Chemical Facility located in Crosby, TX, is a Risk Management Plan (RMP) facility. It manufactures liquid organic peroxides and two substances, sulfur dioxide (anhydrous) and 2-methylpropene are present at, or above, the minimum threshold quantity for RMP applicability. There have been no accidental off-site releases of applicable RMP chemicals from the facility in the previous five years. Officials had warned that the plant could explode after its coolant system for the organic peroxide tanks and backup generators failed due to damage from Tropical Storm Harvey. Flooding prevented repairs from being made. Employees evacuated the facility on August 29th and an evacuation order was established for residents within a 1.5 mile-radius of the facility on August 30th.

On August 31st, at approximately 0345 ET, two incidents of trailer fires were reported at the Arkema facility. According to local responders and media, one of the eight refrigerated trailers on site auto-ignited and burned. As of 4:30pm on August 31st, Arkema management reported that three additional peroxide trailers were close to Self-Accelerating Decomposition Temperature (SADT) which is between 19 and 70 degrees Fahrenheit depending on the type of peroxide. Region 6 continues to work with the Interagency Modeling

Atmospheric Assessment Center on modeling of anticipated future releases at the site. The modeling products are being delivered to Unified Command.

EPA has also identified a risk for a vessel of 38,000 pounds of Isobutylene that is close to the trailers of peroxide. The risk is radiant heat from burning peroxide could ignite the isobutylene. EPA deployed an On-Scene Coordinator (OSC) to the Unified Command post approximately four miles from the facility. Other EPA emergency response personnel in TX are in direct contact with first responders in Harris County and are providing federal assistance and resources.

On September 1st at approximately 1730 EDT, an additional trailer reacted resulting in a large fire with significant amounts of black smoke. During the fire EPA's ground air monitoring results outside of the exclusion zone were below levels of health concern. The fire subsided at approximately 1830 CDT. Unified Command determined that access to the facility is unsafe and a 1.5-mile evacuation radius would remain in effect until further notice.

EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft have been making multiple overflights of the Arkema facility. ASPECT has performed 5 overflights with no detections, with the exception for 2 detections of benzoyl peroxide at approximately 5 ppm which is just above the detection limit. Mobile ground air monitoring for pollutants of concern including VOCs, SO₂ and CO. ASPECT is currently conducting an overflight of the most recent fire on September 1st and will report additional data related to the plume.

Aerial reconnaissance photos indicated that flood waters within the facility have receded significantly. EPA collected surface water runoff samples downstream of the facility at 4 locations near a residential area. The samples are being analyzed by EPA's mobile laboratory and will continue to maintain a 24-hr presence with air monitoring capabilities. Unified Command at the Arkema site continues to coordinate with the EPA Region 6 Environmental Unit to determine locations on the site where flood water samples should be collected.

Harris County Office of Homeland Security and Emergency Management is conducting air monitoring in the area. The Harris County Fire Department is maintaining a 1.5-mile evacuation order around the facility. Poison Control Centers are set up in TX to help citizens who have health concern questions concerning the Arkema facility or other flood-related health questions. Monitoring is being conducted at locations accessible given current flooding and exclusion zone. Four air monitoring teams from EPA, Harris County Pollution Control and Liberty County are conducting monitoring around the exclusion zone. So far, all reading are non-detect at ground levels.

Conoco Philips Oil Spill:

On August 31st, The Conoco Phillips facility in Cuero, TX reported an oil spill consisting of 316 barrels due to Harvey. The spill has impacted Denton Creek. And an emergency response team is responding out of the Corpus Christi Incident Command Post.

Conoco Phillips indicated that they cannot drive to the facility. The Texas Railroad Commission and USCG drove as close to the facility as they could yesterday. No sheen of oil was observed, but the water flowed at a good pace. Waters are receding in the area and personnel will likely be able to access the facility to better assess the release and perform a response. **As of September 2nd, no additional assessment or response has been reported.** Conoco Phillips has updated their release totals to 385 barrels of oil and 76-barrel produced water since the tanks are on their side.

Oil Spills Reported September 2nd:

The Denbury Onshore LLC facility near Friendswood, TX reported an oil spill between 200 and 1,500 barrels of crude oil due to Harvey. Some of the fuel flowed into an underground storm drainage system that empties into tributaries of Cedar Creek. Most oil remained on company's property accord to Denbury Onshore LLC.

A second spill was reported by Linn Operating LLC and involved an unknown amount of oil from a battery of storage tanks in Montgomery County.

Disaster Declarations Issued:

- On August 25th, a major disaster declaration was issued for the state of TX for Hurricane Harvey.
 - An additional 14 counties were added on August 31st.
- On August 28th, an emergency declaration was issued for the state of Louisiana for Tropical Storm Harvey.
- On September 1st, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an Emergency Waiver Order for Texas and Louisiana. The Waiver is granted to support EPA in taking appropriate actions to prepare for, respond to, and recover from a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents resulting from Hurricane and Tropical Storm Harvey.

Region 6:

The Region 6 REOC is currently activated and is working under a limited Emergency Support Function (ESF) 10 FEMA Mission Assignment (MA). In addition, Region 6 has received an MA to assist the State of Texas with drinking water, wastewater, and Hazmat recovery operations. This MA for almost \$8.6 million added 184 EPA and Coast guard (CG) personnel to the Texas Commission on Environmental Quality (TCEQ) Harvey response in Corpus Christi, Houston, and surrounding impacted areas. An additional MA for \$20,000 has been issued to deploy EPA employees to various locations which include but are not limited to the Texas EOC and the Denton RRCC to support response operations.

Beaumont, TX:

As of 1000 CDT on September 1st, the City of Beaumont's surface water treatment plant (SWP) is producing 6-8 million gallons per day (MGD). No water is being sent to distribution as this time, but plant operators are currently attempting to pressurize lines from the plant to pump stations and storage facilities. Attempts to pressurize distribution will be made September 1st. The raw water pumps are not operational, and estimated to remain out of service for 2-3 weeks. Crews are currently on-site laying additional pipe and installing additional pumps.

On September 2nd, the City of Beaumont's water system anticipates being at half capacity, ten million gallons per day. The elevated storage tanks and groundwater tanks are mostly full and are currently valved-off until the system is brought back online. The City of Beaumont will be on a boil water notice when it goes on-line. The City has their Emergency Operations Center (EOC) fully functional and is coordinating efforts to make repairs and acquire chemicals and materials for both short-term and long-term. The groundwater plant remains offline due to flooding.

Regional Mission Assignments:

Mission Assignment Number	Funding Amount	Description of Assignment
MA4332DRTX3	\$8,592,000	R6 Field Ops incl. assessing drinking & waste water infrastructure, implementation of Response Manager tracking system, response to hazardous substances & oil discharges or releases.
MA4332DRTX1	\$20,000	Deployment of EPA to various locations, including but not limited to Texas EOC and the Denton RRCC to support response operations.
Total Funds	\$8,612,000	

Region 6 deployed 2 OSCs on August 25th. One OSC deployed to the FEMA Regional Response Center in Denton, Texas and the second OSC to the State of Texas Operations Center in Austin, Texas.

Region 6 has requested 4 OSCs from Region 2 to deploy to the Houston area. Four OSCs from the availability list have agreed to deploy September 1st, depending on the availability of flights. The REOC in Edison is coordinating logistics for this deployment.

Number of R6 Personnel Involved:

Personnel	EPA R6 Dallas, TX	FEMA Denton, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	Totals
R6	36	1	2	10	9	13	71
START	5			1	1	5	12
ERRS						6	6
Other Contractor	1						1
TOTAL	42	1	2	11	10	24	90

EPA Headquarters:

The HQ EOC activated at 0900 on August 28th and is at Level 1 operations in support of the Region 6 response to Tropical Storm Harvey. The HQ EOC is coordinating on several levels with Region 6 and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF #10 watch. EPA Senior Management that comprise the Policy Coordinating Committee (PCC) is in the process of developing senior management objectives that will form the basis of field strategy and tactics in response to Harvey.

Headquarters Mission Assignments:

Mission Assignment Number	Funding Amount	Description of Assignment
MA4332DRTX1	\$10,000	FEMA HQ ESF-10 Desk Support
4332DRTXEPA0200	\$40,000	FEMA HQ ESF-10 Desk Support
Total Funds	\$50, 000	

Number of HQ Personnel Involved in the EOC:

Personnel	AO	OECA	OCSPP	OGC	OEI	OLEM	OP	OW	Totals
Employees	1	1	1	1	1	12	1	1	19
Contractors					3	3			6
TOTAL	1	1	1	1	4	15	1	1	25

National Incident Management Team (N-IMAT):

EPA has activated the N-IMAT consisting of highly skilled response personnel from Regions 3, 4, and 5 to advise and assist R6 with response activities. Members of the N-IMAT arrived in Dallas on August 29th and are integrated into the Incident Management Team structure.

Criminal Investigation Division (CID):

EPA's Criminal Investigation Division (CID) is sending 25 special agents as a Quick Reaction Team (QRT) to south TX to support the response to Harvey. The response is managed as part of the MA under ESF-13. QRTs are deploying to provide law enforcement support, search and rescue operations, medical assistance teams and mortuary teams during the initial response to Harvey. **As of September 2nd, the EPA CID QRT is enroute the to the affected area for at least 7 days with a possibility of extension.**

State, Local and other Federal Agency Actions:

On August 30th, four National Incident Management Team members traveled to Corpus Christi to establish the Unified Command Center. EPA Region 6, TCEQ, Texas General Land Office (TGLO), and Coast Guard are operating in Unified Command. On August 30th, the Unified Command will have seven teams in the field conducting reconnaissance. The teams will consist of personnel from Region 6, TCEQ, Civil Support Corps, and a CG strike team.

Other EPA Response Activities**EPA Laboratory/Analytical Services:**

An EPA Trace Atmospheric Gas Analyzer (TAGA) vehicle is deployed to Corpus Christi. EPA's Portable High-Throughput

Integrated Laboratory Identification System (PHILIS) units are en route from Denver to the Corpus Christi area and are anticipated to arrive on September 1st. The mobile laboratory will be used to process environmental samples.

On August 31st, EPA deployed four teams made up of On Scene Coordinators and contractors to Houston to coordinate with TCEQ, TGLO, and USCG and began responding to releases and spills at facilities. The teams will conduct rapid needs assessments, oil assessments, and hazards evaluations.

EPA is deploying four teams of On Scene Coordinators and contractors to Beaumont-Port Arthur to coordinate with TCEQ, TGLO, and US Coast Guard in responding to releases and spills at facilities. These teams will stage in Houston until weather allows them to enter the Beaumont-Port Arthur area.

On Saturday, September 2nd, EPA will send four additional Drinking Water/Wastewater Assessment Teams to Corpus Christi, and four Drinking Water/Wastewater Assessment Teams to Houston.

EPA's Houston laboratory is reporting that they will be closed until September 5th. The laboratory and office building are not damaged. Region 6 has back-up capabilities for laboratory services should the Houston facility remain closed. The mobile laboratory and response vehicles are secure and may be deployed when road conditions allow.

The EPA Regional Emergency Operations Center Liaison for the State of Louisiana, is reporting that the Louisiana Department of Environmental Quality (LDEQ) does not currently have any environmental emergencies resulting from the Hurricane Harvey rainfall. The LDEQ has not set up its IMT and does not plan to unless something significantly changes. LDEQ is making calls associated with some wastewater treatment plants in the area. EPA continues to monitor the situation in Louisiana and stay in close communication with LDEQ. As of Sept 2nd, the Louisiana State Emergency Operations Center (EOC) will no longer be fully activated. The main focus for Louisiana at this point is supporting individuals evacuating from impacted areas in Texas.

Quality Assurance Sampling Plans (QASP) for Surface Water Quality Monitoring:

Region 6 Environmental Unit is currently working on a number of sampling and analysis plans in preparation for future sampling tasks.

Industrial Sources:

Region 6 is working with TCEQ to contact industrial sources within the impacted area to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal area of TX. Exxon's oil refinery near Houston has reported suffered damage from Harvey.

On August 29th, TCEQ reported that Valero's Corpus Christi refinery had planned to begin start-up operations, running at 60% capacity until approximately September 3rd.

EPA is deploying four teams of OSCs and contractors to Beaumont-Port Arthur to coordinate with TCEQ, TGLO, and USCG in responding to releases and spills at facilities. These teams will stage in Houston until weather allows them to enter the Beaumont-Port Arthur area.

Drinking Water/Wastewater Assessments:

EPA continues to support TCEQ in contacting drinking water and waste water systems. EPA deployed 10 personnel to assist TCEQ's Drinking Water and Waste Water Phone Bank located in Austin, Texas on August 28th.

Beaumont Water Plant is not operational now, but staff are running a line to the Nueces River near the existing intake on a temporary basis so service can be restored. The groundwater plant remains off-line due to flooding. The surface water treatment plant (SWP) is producing 6-8 million gallons per day (MGD) as of September 1st. No water is being sent to distribution as this time, but plant operators are currently attempting to pressurize lines from the plant to pump stations and storage facilities. The elevated storage tanks and groundwater tanks are mostly full and are currently valved-off until the system is brought back online. The City of Beaumont will be on a boil water notice when it goes on-line.

EPA is working closely with the TCEQ to man a "call bank" to reach drinking water and waste water facilities to determine their needs and operational status. To date, TCEQ and EPA have determined that 61 drinking water systems are not functioning due to loss of power or damage from the storm. Another 58 drinking water systems are compromised and running on generator power. A total of 30 waste water systems are shut down. Boil water orders have been issued as appropriate. Army of Corp of Engineers is working to locate pumps for them. They will either truck or fly them in. The system is good on chemicals and they do have chlorine tanks but they are secure in a building that is not impacted. Also, the Texas State Operations Center (SOC) is working to begin on hauling water as soon as a route is determined.

Summary Information on System Status as Reported by TCEQ		
	Systems	Population
Boil Water Notices (BWN) In Place	166	264,431
Inoperable Public Water Systems	61	226,999
Inoperable Wastewater Treatment Systems	30	NA

Drinking Water Operational Status

Current Status: Operational status codes best describe the condition of the system at the time of the current assessment.

Status Code	Status Detail	Status Code Description	Number of Systems*
OK	No problems	Normal power was never lost (or was restored before pressure loss) AND System never lost treatment.	1212
CLEAR	Lifted BWN due to neg. BacT samples. Normal operations resumed	BW lifted – negative BacT results. System has returned to normal operations, on grid power and with treatment. CLEAR code used when sampling has been used to lift BWN, otherwise OK code is used.	57
GENOK	On generator – never lost pressure	Currently operating on emergency power/generator but system never lost pressure and/or treatment (generator wear out/refueling concerns).	13
GENLP	On generator – lost pressure	Currently operating on emergency power/generator and system lost pressure and/or treatment before getting emergency power (contamination concerns).	10
LP/LT	Lost pressure & or Treatment	System on grid power but has lost pressure and or treatment and has not been able to lift BWN.	54
RESULTS	BacT sample results pending	System functional, flushed and BacT samples collected to clear BWN.	10
INOP	Not Operating	Contact made with system. System is offline & or unable to maintain required pressure and/or treatment.	44
SITE	Site visit needed	Contact attempted at least 3 times over 3 days by phone. Site visit to be conducted.	1
OUT	Out of Contact	Contact attempted by phone but system is unreachable; will call again.	21
NO STATUS	No Status Available	No Contact made.	2927
*Total number of systems from 50 TX counties tracked in Response Manager system.			4512

Note: Codes that result in Red & Yellow will require additional follow up (phone or site). Blue codes require a site visit.

Water Operational Definition: All drinking water served to customers is treated to National Primary Drinking Water Standards and is moving through all parts of the distribution system at or above the state-required minimum pressure (20 psi or 35 psi for Harris County). The system is able to meet these requirements on a permanent basis in lieu of a temporary basis in response to the incident.

Boil Water Notice (BWN): A BWN is required any time a system drops below 20 psi at any point in the distribution system. A 24-hour public notification is required and a system must take bacteriological (BacT) samples once the minimum 20 psi can be consistently maintained. Bacteriological sample analysis must return an “absent” result indicating the sample is absent of bacteriological contamination.

Wastewater Operational Status

Current Status: Operational status codes best describe the condition of the system at the time of the current assessment.

Status Code	Status Detail	Status Code Description	Number of Systems*
OK	No Problems	WWTP and Collection system fully operational and on grid power	428
OpGen	WWTP and Collection on Generator	WWTP and/or Collection system is fully operational and on Generator Power or bypass pumps for lift stations (generator wear out/refueling concerns).	25
Pop	WWTP and Collection Partially Operational SSO	WWTP and/or Collection system partially operational – Sanitary Sewer Overflow (SSO) in collection system (public health concerns).	16
NonOp	WWTP and Collection non-operational no SSO	WWTP and/or Collection system non-operational – No Sanitary Sewer Overflow.	29
SITE	Site Visit Needed	Contact attempted at least 3 times over 3 days by phone. Site visit to be conducted.	1
OUT	Out of Contact - phone eval only	Contact attempted by phone but system unreachable; will call again.	5
NO STATUS	No Status Available	No Contact made.	1912
*Total number of systems from 50 TX counties tracked in Response Manager system.			2469

Note: Codes that result in Red & Yellow will require additional follow up (phone or site). Blue codes require a site visit.

Wastewater Operational Definition - All domestic wastewater collected, treated then discharged or land applied is permitted through the Texas Pollution Discharge Elimination System (30 TAC 305 rules) and discharges are required to meet the standards set by the Texas Surface Water Quality Standards and the Federal Clean Water Act. The wastewater collection and treatment system is able to meet these requirements on a permanent basis in lieu of a temporary basis in response to the incident. This definition does not include "onsite wastewater treatments systems" regulated under 30 TAC 285.

Fuel Waivers:

EPA has waived requirements for reformulated gasoline and low volatility gasoline through September 15th in the following states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania, Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia; all Midwestern states located in PADD 2 - Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, Oklahoma, Tennessee, and Wisconsin; and all Gulf coast states located in PADD 3 – Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

Harvey Related Waiver Requests

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
Reid Vapor Pressure Requirements Waivers				
Texas	Letter from TCEQ requesting a waiver of the RVP, RFG and TxLED standards in the Governor's Disaster Proclamation	8/25/17	Granted on 8/25/17	https://www.epa.gov/enforcement/eastern-and-coastal-texas-fuels-waiver
Georgia	Amended letter from Georgia Department of Natural Resources for Atlanta RVP to waive 7.8 RVP requirement to 11.5 RVP	8/29/17	Granted on 8/29/17	https://www.epa.gov/enforcement/louisiana-fuels-waiver
Louisiana	Letter from Louisiana governor requesting a waiver of the low RVP requirements.	8/28/17	Granted on 8/28/17	https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
Arkansas	The state is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel.	8/31/17	N/A	N/A
Oklahoma	A statewide low RVP fuel waiver request was submitted and then the request was amended.	8/28/17	8/30/17	https://www.epa.gov/enforcement/second-multi-state-fuels-waivers
Dyed NRLM Diesel Fuel Waiver				
Texas	Letter from Texas Comptroller requesting a waiver of using dyed NRLM diesel fuel in motor vehicles.	8/29/17	Granted on 8/29/17	https://www.epa.gov/enforcement/texas-diesel-waiver
Low Volatility Conventional Gasoline and Reformulated Gasoline (RFG)				

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania, Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia; all mid-western states located in *PADD 2 - Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, Oklahoma, Tennessee, and Wisconsin; and all Gulf coast states located in PADD 3 –Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas	Issuance of waivers based on requests for the allowance of regulated parties within the listed states to produce, sell, or distribute conventional winter gasoline (including BOBs) with an RVP of 11.5 psi before the addition of any ethanol in any RFG covered area. The waiver for El Paso, Texas goes until September 16 th due to their State Implementation Plan requirements.	8/30/17	Granted on 8/31/17	https://www.epa.gov/enforcement/second-multi-state-fuels-waivers

***PADD: Petroleum Administration for Defense Districts**

Other EPA Response Actions:

Data Management: Two Data Team members have been deployed and are expected to arrive in Corpus Christi by September 1st. Region 6 will provide technical support to state regulatory agencies both at the GLO and TCEQ to gather data and information in Response Manager, a systemized response data management system.

Communications:

An EPA HQ Public Information Officer (PIO) is fully integrated into the Department of Homeland Security and FEMA communication structure and management, and participates in the daily National Incident Communication Conference Line (NICCL) call. As of September 1st, EPA activated the Crisis Communication Plan to ensure rapid response to providing coordinated, accurate, up-to-date information regarding its field activities. EPA's Public Information Office will be established in Dallas with forward field components as needed to support the HQ Office of Public Affairs.

EOC PIO is currently working with program offices and OPA to review and approve fact sheets on a variety of topics related to EPA's response activities. OPA plans to post the fact sheets to the response website as they get approved. Fact sheets prepared by OW and OLEM will be posted by August 31st. EOC PIO continues to work on review and approval of additional fact sheets provided by ORD, OCSPP and OAR / ORIA (Indoor Air Quality). We are also coordinating with FEMA / ESF-15 on external messaging and communications.

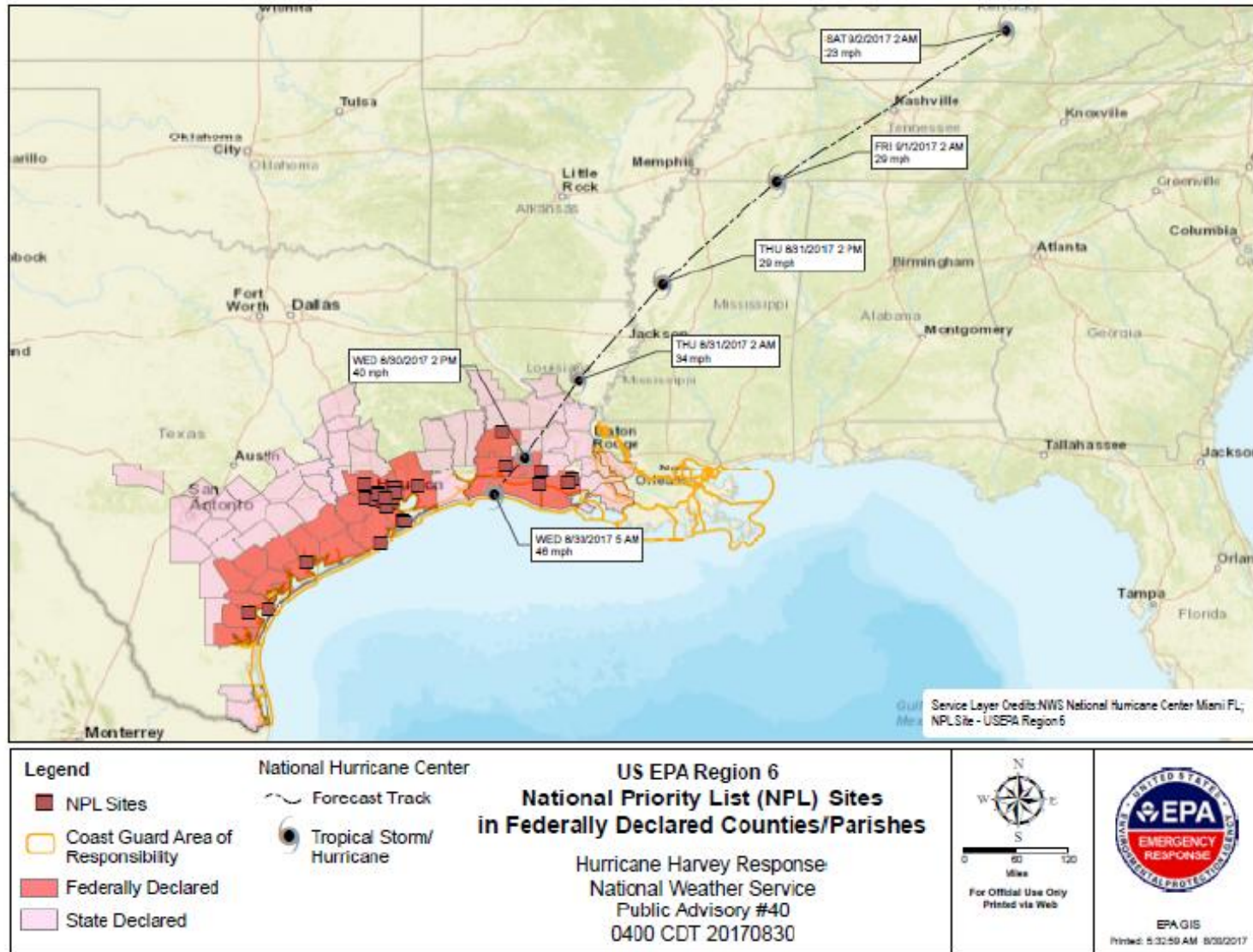
Under a FEMA MA, EPA deployed a Public Affairs Officer to the ESF-15 Joint Information Center in Austin. The EPA Public Information Unit in Dallas is fully operational and supported by a Public Information Assistance Team (PIAT). An EPA PIO is also in Corpus Christi to support operations at the ESF-10 Unified Command.

Superfund NPL Sites: EPA Remedial Managers will initiate follow-up activities at the 31 Superfund NPL sites within the storm path to conduct rapid damage assessments and determine if additional emergency cleanup activities are necessary.

Superfund Site Name	State	County	Status
American Creosote Deridder	LA	Beauregard	
Gulf State Utilities (North Ryan Street)	LA	Calcasieu	
Mallard Bay Landing Bulk Plant	LA	Cameron	
Sba Shipyard	LA	Jefferson Davis	
Pab Oil & Chemical Service	LA	Vermilion	
Gulf Coast Vacuum Services	LA	Vermilion	
D.L. Mud, Inc.	LA	Vermilion	
Gulfco Marine Maintenance	TX	Brazoria	
Alcoa (Point Comfort) / Lavaca Bay	TX	Calhoun	
Tex-Tin Corp.	TX	Galveston	
Motco, Inc.	TX	Galveston	
Malone Services Company	TX	Galveston	
Sikes Disposal Pits	TX	Harris	
French, Ltd.	TX	Harris	
Highlands Acid Pit	TX	Harris	
North Cavalcade Street	TX	Harris	
South Cavalcade Street	TX	Harris	
Crystal Chemical Co.	TX	Harris	
Sol Lynn / Industrial Transformers	TX	Harris	

Superfund Site Name	State	County	Status
Geneva Industries / Fuhrmann Energy	TX	Harris	
Harris (Farley Street)	TX	Harris	
Brio Refining Inc.	TX	Harris	
Dixie Oil Processors Inc.	TX	Harris	
Many Diversified Interests, Inc	TX	Harris	
Patrick Bayou	TX	Harris	
Jones Road Groundwater Plume	TX	Harris	
San Jacinto River Waste Pits	TX	Harris	
Us Oil Recovery	TX	Harris	
Petro-Chemical Systems, Inc. (Turtle Bayou)	TX	Liberty	
Brine Service Co.	TX	Nueces	Inspected on 8/30/17. No offsite release or onsite damage.
Falcon Refinery	TX	San Patricio	Inspected on 8/30/17. No offsite release or onsite damage.

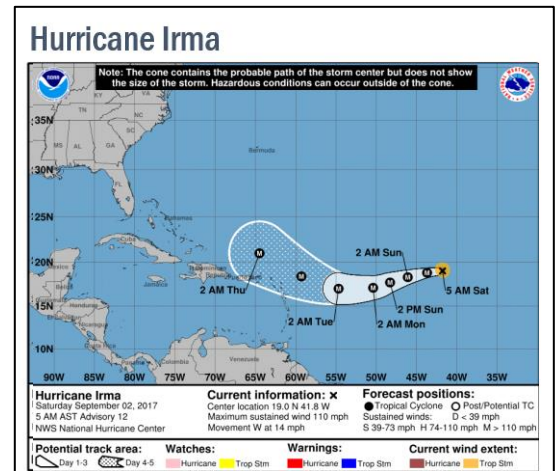
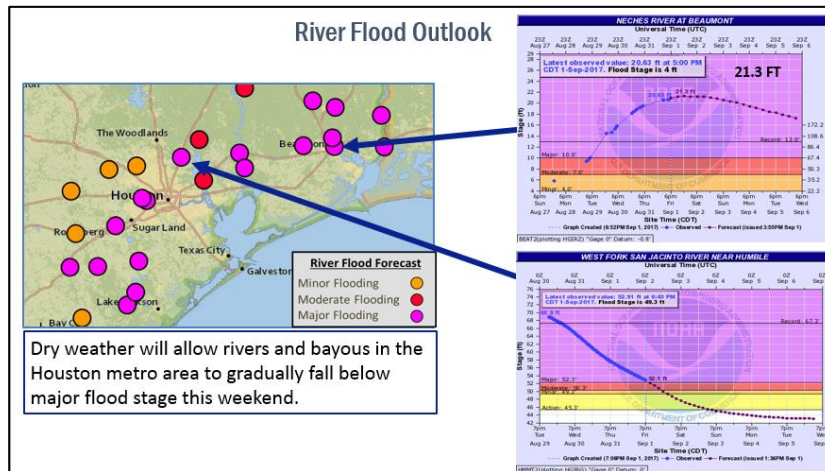
Superfund National Priority List (NPL) Sites in Federally Declared Counties



Senior Leadership Briefing
Post Tropical Cyclone Harvey
Saturday, September 2, 2017 (5:00 a.m. EDT)
Updates in Blue

Current Situation:

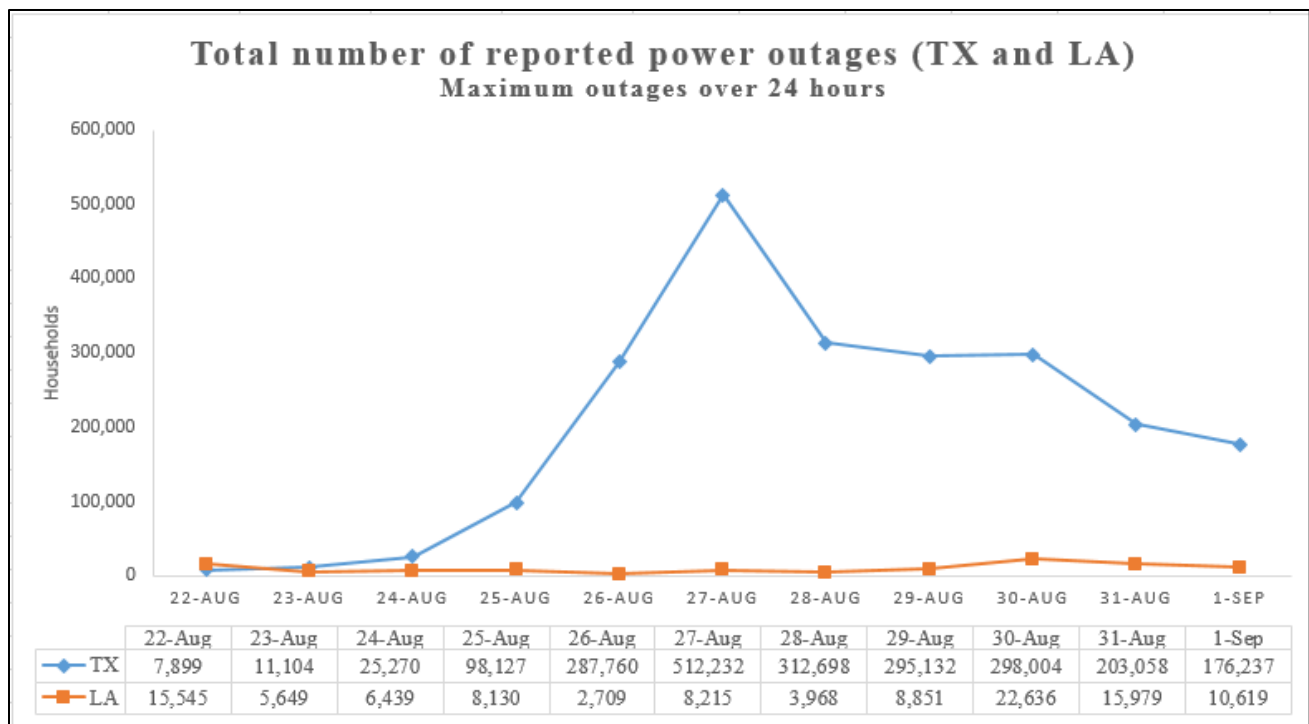
The remnants of Harvey will move through portions of the Northeast and Mid-Atlantic on Saturday. There could be some localized flash flooding and isolated tornadoes, however no widespread significant impacts are expected. Major to record flood impacts will continue along the mid and upper TX coasts and LA as peak river crests are likely to occur for most of the weekend. Long-duration flooding will significantly hamper response and recovery activities with chances for additional showers and thunderstorms in the area Sunday through Tuesday. (NOAA Update, September 2, 2017, 3:23 a.m. EDT)



Impact Summary:

- **Fatalities:** Media reporting at least 39 fatalities; state has not confirmed number of fatalities (Associated Press, September 1, 2017, 5:09 a.m. EDT)
- **Critical Infrastructure:**
 - Airports:
 - Open: George W. Bush Intercontinental (IAH), Corpus Christi International (CRP), William P. Hobby International (HOU), Victoria (VCT), Galveston (GLS), Corpus Christi (CRP), and New Orleans (MSY)
 - Closed: Jack Brooks Region (BPT) except for emergency aircraft (i.e. emergency landing); estimated reopening 10:00 a.m. on September 4; Texas Gulf Coast Regional (LBX) except for relief aircraft; and Houston Executive (TME) with restricted operations
 - Special Government Interest authorizations/waivers approved for the following Unmanned Aircraft System (UAS) operations in the disaster area: Houston, TX; Baton Rouge, LA; Sugar Land, TX; River Plantation, TX (ESF-1 Update, September 1, 2017, 11:26 p.m. EDT)
 - Federal Aviation Administration (FAA) has issued six active Airspace Coordination Areas (ACA) through September 1 for Houston and three ACAs through September 9 for LA
 - FAA issued multiple Temporary Flight Restrictions (TFRs) around Houston for safety rescue operations (ESF-1 Update, September 1, 2017, 10:23 a.m. EDT)
 - Rail:
 - BNSF Railway (BNSF): Galveston Yard is out of service with no estimated time of opening
 - Kansas City Southern Railroad (KCS): **Beaumont Substation at Mauriceville is out of service due to water over the rails** (ESF-1 Update, September 1, 2017, 11:36 p.m. EDT)
 - Union Pacific Railroad (UP): Repairs between Houston and San Antonio underway

- Louisiana Northwestern Railroad (LNW): operational Tuesday, September 5 (*ESF-1 Update, September 1, 2017, 1:24 p.m. EDT*)
- Louisiana Delta Railroad (LDRR) interchanges with UP Railroad at New Iberia are shut down (*ESF-1 Update, September 1, 2017, 11:36 p.m. EDT*)
- Public Transit:
 - Victoria Transit running emergency services delivering food, water, ice, dialysis, and emergency medical transportation; plans to maintain this operation until September 5, 2017 (*ESF-1 Update, September 1, 2017, 11:45 a.m. EDT*)
- Ports:
 - Closed: Victoria, TX
 - Open with restrictions: Corpus Christi, Houston, Beaumont, Port Arthur, Orange TX and Lake Charles, LA
 - Open: Brownsville, Galveston, Texas City, Freeport TX and all other Gulf of Mexico ports (*ESF-1 Update, September 1, 2017, 11:39 p.m. EDT*)
- Power Outages: 144,906 (-8,037) customers in TX and 728 (-775) in LA without power (*ESF-12 Update, September 1, 2017, 11:20 p.m. EDT*)



- Oil and Natural Gas:
 - Refineries beginning the process of restarting; six of ten previously closed refineries in the process of restarting, with an additional five operating at reduced rates (*ESF-12 Update, September 1, 2017, 11:20 p.m. EDT*)
- Water:
 - Pump, generator, and fuel arrived in Beaumont, TX, and is being installed to commence water treatment plant operations (*DHS/FEMA Region IV email, September 1, 2017, 8:21 p.m. EDT*)
- Dams and Levees:
 - Addicks and Barker reservoirs: Controlled releases are ongoing and water levels receding at both facilities; Addicks at 100% of reservoir capacity and Barker at 82% reservoir capacity (*ESF-3 Update, September 1, 2017, 8:34 p.m. EDT*)

When Will Major Flooding Recede?			 West Gulf River Forecast Center
Area	Waterway	Below Major Recession Date	Additional Info
Columbus	Lower Colorado River	Receded	Drop out of flood Thursday night
Cuero	Guadalupe	Receded	Continue to fall as two rivers meeting are falling
Houston	Cypress Creek	Receded	Rapid Recession ongoing
Houston	West Fork San Jacinto near Humble	Saturday 9/2	Is receding but to still above major thru today
Victoria	Guadalupe	Saturday 9/2	Crested Thursday, falling below major on Saturday
Boling	San Bernard River	Sunday 9/3	Above record; expect a sharp recession this weekend
Kountze	Village Creek	~9/3 -9/5	Gage out; has a lot of small bayous that impact height
Wharton	Lower Colorado	Monday 9/4	Broad crest now before beginning to fall this weekend
Below Lake Limestone	Trinity River	Beyond Wed. 9/6	Livingston reducing releases, crest at Liberty today
Richmond	Brazos River	Beyond Wed. 9/6	Above record last year, still rising, crest ~56 feet Fri/Sat
Beaumont	Lower Neches	Beyond Wed. 9/6	Crest Saturday around 20 feet (No Gage) Above Record
Deweyville	Sabine River	Beyond Wed. 9/6	Toledo Bend still releasing, crest 31.57' tomorrow
Orange	Sabine River	Beyond Wed. 9/6	Crest 6.8 feet Monday and stay elevated into next week
Houston	Buffalo Bayou	Until Further Notice	Dictated by releases from Addicks and Barker
Brazoria County	Brazos River	Beyond next week	Probably the longest recession time
Sweeney	San Bernard	Beyond next week	May be part of the Brazos and Colorado Rivers

(NOAA Update, September 1, 2017, 3:02 p.m. EDT)

Declaration Activity: (see Declarations Map, page 10)

• Texas

- Major Disaster Declaration FEMA-4332-DR-TX effective August 25, 2017:
 - Amendment No. 3, effective September 1, includes three additional counties approved and added for Individual Assistance, Category A and B, including direct federal assistance under the Public Assistance program: Polk, Tyler, and Walker, bringing the total number of counties under disaster declaration to 36 (*Amendment No. 3 to Disaster Declaration, September 1, 2017*)
 - Amendment No. 2, effective August 30, includes 11 additional counties approved and added for Individual Assistance, Category A and B; an additional three counties were added for emergency protective measures (Category B) under the Public Assistance program (*Amendment No. 2 to Disaster Declaration, August 30, 2017*)
 - Amendment No. 1, effective August 27, for 19 counties
 - Federal Coordinating Officer (FCO) is Kevin L. Hannes (*Amendment No. 1 to Disaster Declaration, August 27, 2017*)

• Louisiana

- Emergency Declaration FEMA-3382-EM-LA effective August 27, 2017:
 - FEMA authorized to provide emergency protective measures (Category B), including direct federal assistance, under the Public Assistance program for five parishes (*Emergency Declaration Summary 3382, August 28, 2017, 8:21 a.m. EDT*)
 - Amendment No. 1, effective August 28, includes seven additional parishes approved and added for emergency protective measures (Category B), including direct federal assistance, under the Public Assistance program (*Amendment No. 1 to Disaster Declaration, August 28, 2017*)
 - Additional seven parishes added for Category B: Allen, Acadia, Iberia, Natchitoches, Rapides, Sabine, and Vernon, bringing the total to 19 (*Region VI Situational Awareness Section, September 1, 2017, 12:01 p.m. EDT*)
 - FCO is William J. Doran III

Federal Force Laydown: (See Federal Force Laydown Map, page 12)

Department/ Agency	Personnel Deployed	Department/ Agency	Personnel Deployed
FEMA – Deployed	1,847 (+10)	National Weather Service	82
FEMA – Other Support	2,050 (+11)	Department of Defense - Guard Bureau - Title 32	17,928 (+592)
Urban Search & Rescue	1,136 (+3)	Department of Defense – Title X	1,638
Health and Human Services	1,303 (+80)	General Services Administration	35
Department of Transportation	12 (-8)	U.S. Army Corps of Engineers ESF #3	130 (+6)
United States Coast Guard	1,469	Department of the Interior	219 (+101)
DHS – NPPD	24	U.S. Forest Service (ESF 4)	252 (31)
Department of Energy	5	Small Business Administration	67
US Department of Agriculture	7 (-4)	Transportation Security Administration	232
Law Enforcement (ESF 13)	1,060	Housing and Urban Development	1
Customs and Border Protection	742 (-3)	Department of State	6
TOTAL			30,245 (+825)

FEMA Headquarters:

- National Response Coordination Center (NRCC) activated to Level I (24/7) (all Emergency Support Functions [ESFs] and Liaison Officers [LNOs]) *(NRCC Planning Section Update, August 28, 2017, 4:00 p.m. EDT)*
- FEMA Region II Incident Management Assistance Team (IMAT) 1 demobilized for possible deployment for Irma *(Region VI Situational Awareness Section, September 1, 2017, 12:01 p.m. EDT)*
- **Recovery**
 - Mike Byrne named as the Federal Disaster Recovery Coordinator (FDRC) *(ESF-15 update, September 1, 2017, 1:30 p.m. EDT)*
 - Total IHP registrations: 481,346 (+32,999)
 - Total IHP dollars approved: \$105,686,873 (+\$22,195,881)
 - Housing Assistance: \$28,761,510 (+\$5,727,506)
 - Other Needs Assistance: \$76,925,363 (+\$16,468,376) *(Open Disaster Report, September 1, 2017, 11:01 p.m. EDT)*
 - Surge staffing continues for FEMA Strategic Workforce Augmentation Team (SWAT) for taking calls from three NPSCs, FEMA pop-ups, Headquarters, all FEMA Regions, and from home; 1,593 staff, including SWAT, projected to be online with capacity for 24,263 calls on September 1 *(Recovery Contact Center Surge Staffing Timeline, September 2, 2017, 12:00 a.m. EDT)*
 - Housing Inspection Services confirmed 1,482 (+33) badged inspectors are on the ground *(Recovery Contact Center Surge Staffing Timeline, September 2, 2017, 12:00 a.m. EDT)*
 - First Mobile Disaster Recovery Center (DRC) opened Friday, September 1 at Edna High School Football Stadium in Edna, TX, operating from 9:00 a.m. to 6:00 p.m. *(ESF-6 Update, September 1, 2017, 10:00 a.m. EDT)*
 - Transitional Sheltering Assistance (TSA): 10,260 (+2,268) households have checked into hotels from 29 TX counties *(Recovery Contact Center Surge Staffing Timeline, September 1, 2017, 12:00 p.m. EDT)*
- **Federal Insurance and Mitigation Administration**
 - FEMA directed NFIP to begin issuing advance payments to assist NFIP policy holders impacted by Hurricane Harvey

- \$1.7 billion available to pay claims and \$5.8 billion in borrowing authority to pay claims resulting from Hurricane Harvey (*FIMA Update, September 1, 2017, 10:57 p.m. EDT*)
- Over 63,000 National Flood Insurance Program (NFIP) claims submitted (*FIMA Update, September 1, 2017, 2:36 p.m. EDT*)

FEMA Region VI:

- Regional Response Coordination Center (RRCC) activated to Level I (24/7)
- Joint Field Office (JFO) in Austin, TX opened September 1
- **Texas**
 - State EOC at Full Activation
 - Active Emergency Management Assistance Compact (EMAC) missions include swift water, boat, advisory teams, civil support teams, patient medevac support, transitional shelter and housing subject matter experts, and helicopters; additional requests and pending mutual aid for additional swift water rescue, incident management teams, helicopters, and other support in process (*National EMAC Sit Rep #7, August 31, 2017, 1:00 a.m. EDT*)
 - 28 states are actively or in the process of providing support via EMAC (*SITREP #10, September 1, 2017, 4:11 p.m. EDT*)
 - Houston, TX implemented a curfew from 10:00 p.m. to 5:00 a.m. until further notice (*ESF-13 Update, September 1, 2017, 11:41 a.m. EDT*)
 - Texas National Guard, US Coast Guard, and American Airlines, through combined resources, evacuated 2,080 individuals from Beaumont, TX (*Region VI SAS Unit Lead, September 1, 2017, 11:59 p.m. EDT*)
- **Louisiana**
 - State EOC at Level I (24/7) Operations (ESFs 1, 3, 6, 7, 8, and DoD)
 - New Orleans EOC at Full Activation (*FEMA Region VI Spot Report, August 30, 2017, 1:00 a.m. EDT*)

Interagency Coordination/Response:

- **ESF-1: Transportation**
 - Three cruise ships previously unable to return to port arrived in Galveston September 1; a fourth cruise ship is in transit to Galveston on September 2; cruise lines plan to resume normal schedules from Galveston on September 2 or 3 (*USCG Update, September 1, 2017, 2:19 p.m. EDT*)
 - Port assessments underway in the Corpus Christi, TX area; United States Army Corps of Engineer (USACE) survey of deep draft channel is ongoing (*USCG Update, September 1, 2017, 2:19 p.m. EDT*)
- **ESF-2 Communications**
 - Commercial communications companies assessing site damage and prioritizing service restoration as water recedes (*ESF-2 Update, September 1, 2017, 10:43 p.m. EDT*)
 - 27 of 36 Mobile Emergency Response Support (MERS) teams and 25 Mobile Communications Office Vehicles (MCOVS) deployed to TX and LA; continuing to arrive in selected Resource, Staging, Onward Movement, and Integration sites (*ESF-2 Update, September 1, 2017, 10:43 p.m. EDT*)
 - Reported cell tower outages remained steady with roughly 2.4% (-3.8%) outage in the disaster area
 - Public Safety Answering Points (PSAP): Seven PSAPs out of service but all have been re-routed so calls can be answered (*ESF-2 Update, September 1, 2017, 10:43 p.m. EDT*)
- **ESF-3: Public Works and Engineering**
 - United States Army Corps of Engineers (USACE) continuing pre-installation inspections and generator installations in support of Temporary Emergency Power Mission; 32 currently installed and 15 in progress (*ESF-3 Update, September 1, 2017, 8:34 p.m. EDT*)
 - Two USACE personnel deploying to Corpus Christi and Harris County to facilitate coordination with EPA and Texas Commission on Environmental Quality water teams (*WWW-COP, September 1, 2017, 8:30 p.m. EDT*)
- **ESF-4: Firefighting**
 - Three Incident Management Teams (IMTs) and four crews currently assigned to manage Resource Staging Areas and one IMT assigned to support community level logistics and emergency planning (*ESF-4 Update, September 1, 2017, 11:49 p.m. EDT*)

- **ESF-5: Information and Planning**
 - NOAA conducting aerial imagery operations (*NOAA Update, September 1, 2017, 6:53 p.m. EDT*)
 - TX Army National Guard and Royal Singaporean Air Force conducted first joint mission September 1, supporting response and recovery efforts (*FEMA International Affairs Update, September 1, 2017, 1:48 p.m.*)
- **ESF-6: Mass Care**
 - Individual & Households Program (IHP):
 - 118,775 applicants approved for IHP (\$79.7 million) (*ESF 6 update, September 1, 2017, 1:16 p.m. EDT*)
 - 500 U.S. Army Corps of Engineers and 200 Department of Interior staff requested for 30 days to perform housing field inspections (*ESF 6 update, September 2, 2017, 12:53 a.m. EDT*)
 - Six month extension provided for Lodging Expense Reimbursement for applicants who incur out-of-pocket temporary lodging expenses due to damage affecting the habitability or accessibility of their primary residence, effective August 25, 2017 (*ESF 6 update, September 2, 2017, 2:01 a.m. EDT*)
 - Donations Management Task Force in coordination with External Affairs, International Affairs has scheduled a shipment of donations to arrive from Canada on September 2, 2017 (*ESF 6 update, September 2, 2017, 12:53 a.m. EDT*)
 - Shelters: Three mega shelters open at Houston Convention Center, NRG Stadium in Houston, and Kay Bailey Hutchinson Convention Center in Dallas; current shelter population estimated to be 42,399 (+8,545) at 258 (+15) shelters in Texas and 1,507 (-172) people at six shelters in Louisiana (*ESF-6 Update, September 1, 2017, 6:00 a.m. EDT*)
- **ESF-7: Logistics Management and Resource Support**
 - Coordinating with FEMA International Affairs Division to receive pediatrics supplies donated from Canada on September 3
 - Three Incident Support Bases (ISBs) operating at Randolph-San Antonio, TX, Seguin, TX, and Pineville, LA
 - Commodity and distribution plan complete, sent commodities forward to ISBs and onward to federal and state staging areas set up
 - 22 Points of Distribution (PODs) currently operational in TX with meals and water staged and in transit
 - Planning to set up two responder support camps in TX:
 - Contracting for 500 beds at Cabanis Field in Corpus Christi and 1,500 beds at Ford Park in Beaumont, TX
 - Procured contract for first responder lodging facility (350 beds) at the USS Lexington Aircraft Carrier Museum in Corpus Christi, TX
 - Identifying additional large store front-type facilities in the Houston area for potential use as first responder lodging (*ESF-7 Update, September 1, 2017, 11:53 p.m. EDT*)
 - Maritime Administration (MARAD) sending three berthing ships to Area of Responsibility: *Empire State (NY)*, *Kennedy (MA)*, due to arrive September 13 weather permitting; *General Rudder* currently in Galveston
 - Establishing generator and pump staging at Federal Staging Area (FSA) in Bryan, TX
 - 32 (-2) of 320 General Services Administration (GSA) owned and leased Federal buildings in affected areas in TX and LA closed; GSA deployed Delta Emergency Response Team to assess Federal buildings from west to east starting in Corpus Christi, TX (*ESF-7 Update, September 1, 2017, 4:26 p.m. EDT*)
 - Examining contracting options for a comfort station for responders in Seguin, TX (*OEHP Update, September 2, 2017, 12:30 a.m. EDT*)

Commodities Staged in TX

Product	Number Ordered	En route - ISB/FSA	Arrived - ISB/FSA	Released to State
Generators	201	61	134	0
Meals	26,927,120	2,521,120	7,105,526	4,091,131
Sheeting	8,000	1,248	6,816	0
Tarps	24,188	1,560	22,426	0
Water (Liters)	42,464,606	3,209,517	9,119,762	4,021,604
Blankets	128,002	6,676	122,261	13,995
Cots	84,861	27,214	31,999	13,472
Fuel	600,000	6,000	96,480	0
Infant/Toddler Kits	344	221	60	60
Durable Medical Equipment (reusable)	13	7	3	3
Consumable Medical Supplies (one-time use)	10	6	2	2

(ESF-7 Update, September 2, 2017, 12:00 a.m. EDT)

Commodities Staged in LA

Product	Number Ordered	En route - ISB/FSA	Arrived - ISB/FSA	Released to State
Generators	29	0	29	0
Meals	1,419,000	0	1,475,076	416,124
Tarps	22,000	0	19,088	0
Water (Liters)	2,000,000	0	2,029,706	414,069
Blankets	4,500	0	5,202	0
Cots	2,100	0	2,160	0
Infant/Toddler Kits	10	0	20	20
Durable Medical Equipment (reusable)	1	0	1	1
Consumable Medical Supplies (one-time use)	1	0	1	1

(ESF-7 Update, September 2, 2017, 12:00 a.m. EDT)

- **ESF-8: Public Health and Medical Services**

- Escalating health threats due to, but not limited to, crowded shelters, flooding, chemicals, mold, Salmonella, E.Coli, etc.
- Flood waters will wash away immature mosquito populations, which if re-established in standing waters, could increase transmission of life-threatening mosquito-borne diseases including West Nile virus and St. Louis encephalitis. (HHS Situation Report, September 1, 2017, 8:00 p.m. EDT)
- Full Incident Response Coordination Team pre-staged in Dallas and relocating to Austin on September 3; second Incident Response Coordination Team deployed members to Louisiana
- 29 hospitals evacuated/closed; 12 (+5) hospitals re-opened
- 23 dialysis facilities closed; 79 dialysis facilities re-opened (EST-8 Update, September 1, 2017, 9:54 p.m. EDT)

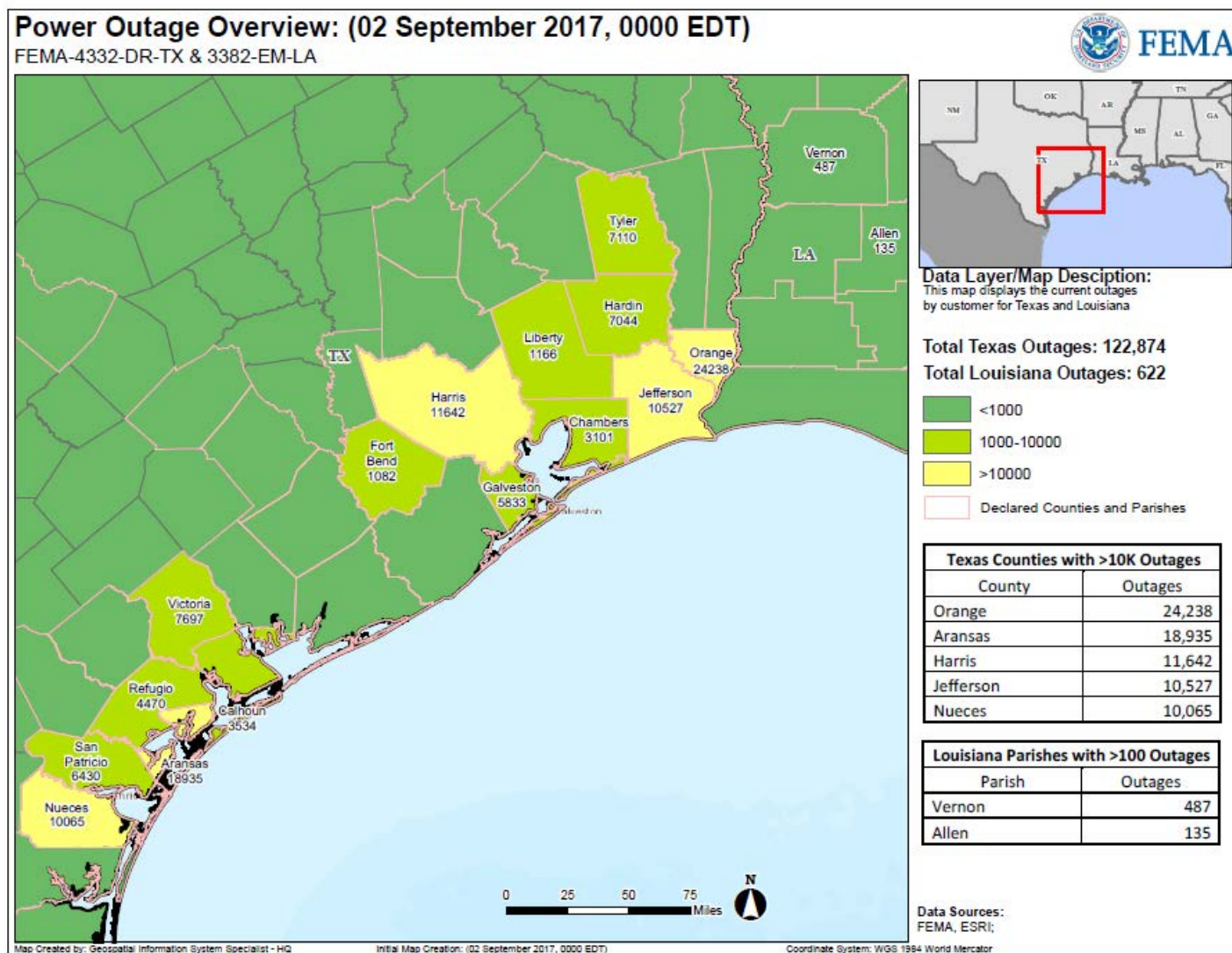
- **ESF-9: Search and Rescue (SAR)**

- Total number of people rescued by Federal responders to date estimated at over 28,264 individuals and 1,614 pets

- FEMA Urban Search and Rescue (US&R): Rescued/assisted roughly 5,985 individuals and 206 pets (*ESF-9 Update, September 1, 2017, 11:45 pm. EDT*)
- DoD NORTHCOM: Rescued/assisted 2,038 (*DoD, September 2, 2017, 12:38 a.m. EDT*)
- USCG: Rescued or assisted 10,953 survivors and 1,379 pets (*ESF-9 Update, September 2, 2017, 12:42 a.m. EDT*)
- DoD/Title 10: 935 rescued (*DoD update, August 31, 2017, 8:00 a.m. EDT*)
- National Guard Bureau (NGB): 6,283 rescued (*NGB update, September 2, 2017, 2:11 a.m. EDT*)
- U.S. Customs and Border Protection (CBP): 1,360 people rescued and 29 pets (*CBP update, September 1, 2017, 8:00 p.m. EDT*)
- A long-term Base of Operations for all FEMA US&R resources has been established in Katy, Texas (*ESF-9 Update, September 2, 2017, 12:42 a.m. EDT*)
- **ESF-10: Oil and Hazardous Materials Response**
 - Efforts related to explosion at the Arkema Chemical Plant in Harris County, TX:
 - Texas Commission on Environmental Quality reporting trailers containing Organic Peroxide are currently on fire and emitting black smoke
 - Six remaining trailers of the chemical-compound at the facility, with remaining chemical-compounds expected to degrade at any time
 - No known incidents involving the storage of Sulfur Dioxide at the plant (*FEMA Situation Desk, TX SOC, September 1, 2017, 10:00 p.m. EDT*)
 - Beaumont, TX Water Status:
 - Surface water treatment plant is producing 6-8 million gallons of water per day, but no water is being distributed because plant operators are testing pressurized lines from the plant to pump stations
 - Raw water pumps are not operational and estimated to remain out of service for 2-3 weeks; crews are on-site laying additional pipe and installing additional pumps
 - Residents are on a boil water notice, being provided bottled water, and portable toilets are being set up
 - National Response Center received 128 oil/hazmat incident reports related to hurricane Harvey; a Unified Command is coordinating Rapid Needs Assessments in Beaumont, Port Arthur, and Corpus Christi as weather and flooding permit and one infrastructure team conducted a water system assessment in the Corpus Christi area (*ESF-10 update, September 1, 2017, 10:37 p.m.*)
- **ESF-11: Agriculture and Natural Resources**
 - Completed agricultural related assessments in 13 of 32 counties on August 31 and September 1, with estimated completion date of September 21 for remainder; locals and TX Department of Transportation are managing livestock carcasses in public areas and a combination of state, local, and Federal (United States Department of Agriculture [USDA]) responders are addressing stranded/stray livestock
 - Veterinary Medical Officers deploying to College Station, TX; two arrived September 1, one arriving September 2
 - Multi-agency Pet Task Force and USDA APHIS Animal Care continuing coordination with state and Non-Governmental Organization (NGO's) deployed to the disaster area, providing assistance to locals with animal issues
 - Coordinated request for supply of Salinity meters for Texas Department of Agriculture to test drinking water sources for livestock
 - Coordinated transport and delivery of 600 pet cages in FEMA's inventory from LA to TX, completed September 1 (*ESF-11 Update, September 1, 2017, 11:20 p.m. EDT*)
- **ESF-12: Energy**
 - Strategic Petroleum Reserve (SPR) authorized to negotiate and execute emergency exchange agreements for up to 5.3 million barrels of crude oil from SPR's West Hackberry and Bayou Choctaw sites (*ESF-12 Update, September 1, 2017, 11:20 p.m. EDT*)
 - Sufficient fuel supplies reported, but hampered in some cases by temporary supply-chain distributions, the result of elevated consumer purchases
 - Pipelines in the Corpus Christi area are temporarily shut down, refineries are using alternate means to obtain sweet crude oil (*ESF 12, September 1, 2017, 3:31 p.m. EDT*)

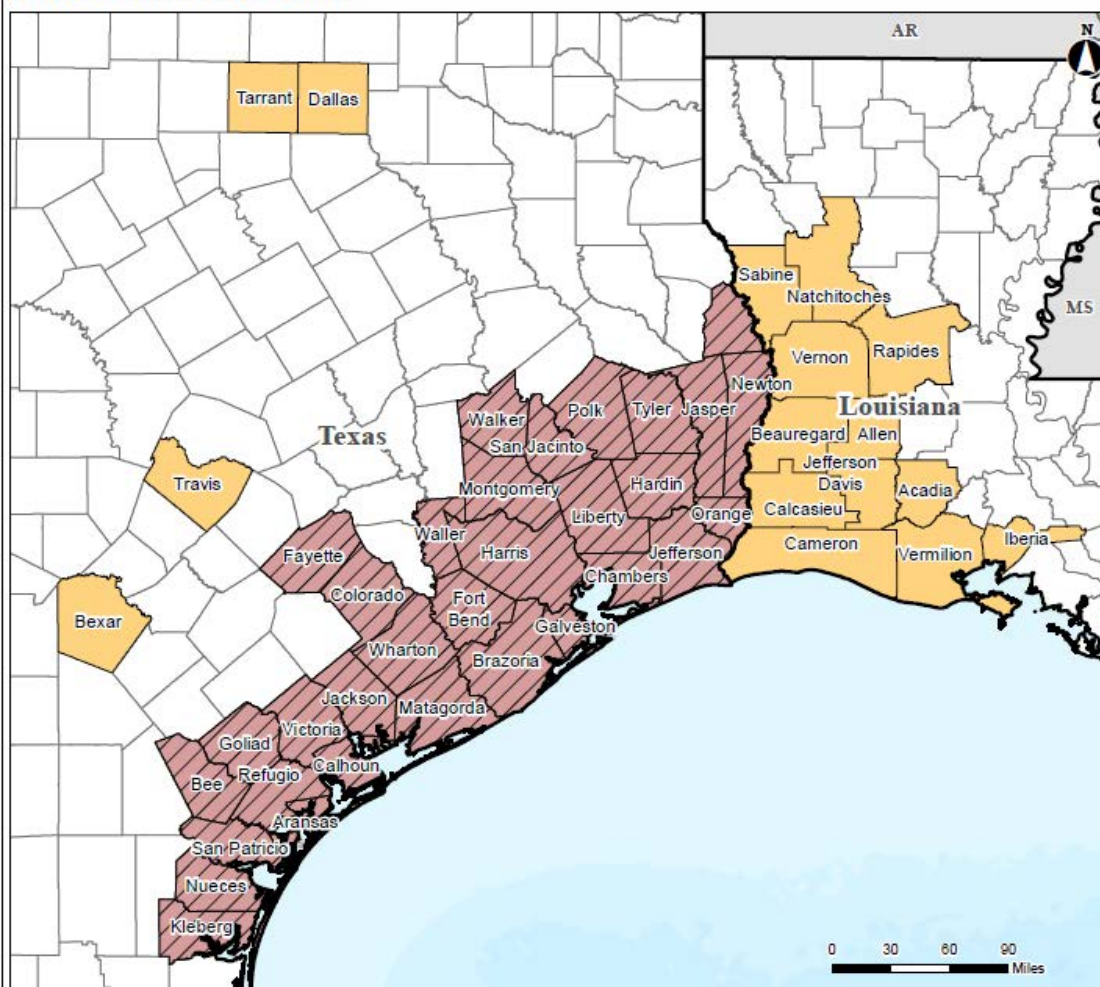
- **ESF-13: Public Safety and Security**
 - Bureau of Prisons (BOP) is supporting the ESF 13 deployment with three BOP Base Camp Security Teams, two mobile command vehicles, and two mobile bunkhouses
 - U.S. Marshals Service (USMS) has deputized 189 Federal agents and local constables have made a further 175 state deputations throughout the last 24 hours (*ESF-13 Update, September 1, 2017, 11:41 a.m. EDT*)
- **ESF-15: External Affairs**
 - Continuing to conduct rumor control on fuel shortages, FEMA hiring opportunities, flood insurance, disaster cleanup, and inspections; flagging known scams for the public and partners
 - Disasterassistance.gov landing page updated with banner links to hotels participating in Transitional Sheltering Assistance (TSA) program, volunteer opportunities, and resources for community leaders
 - Holding daily coordination calls and disseminating advisories and news releases to stakeholders
 - Private Sector:
 - Continues to coordinate with private sector partners on providing TSA information to hotels, amplifying assistance information, responding to queries, and tracking open/closed status in impacted areas
 - Social Media Conversation (reports being published 4 times a day for situational awareness):
 - In the affected area, there is a split between those still talking about response/rescue efforts (primarily outside of Houston) and those who are talking about recovery efforts such as cleaning up homes and debris (primarily in Houston and Aransas County)
 - Volunteers from out of state are frequently sharing plans to bring truckloads of items into affected areas, but often the volunteers do not have pre-arranged delivery sites
 - Community groups being created by local neighborhoods looking to share detailed, specific information to their communities regarding recovery efforts (*ESF-15 Update, September 2, 2017, 12:01 a.m. EDT*)
- **U.S. Coast Guard**
 - USCG delivered water and supplies to Houston/Galveston on September 1, USCG Cutter Forward is underway for offshore search and rescue coverage off southeast Texas, and USCG Cutter Benjamin Daily is moored at Public Pier 1 in Galveston to provide additional support (*USCG Update, September 2, 2017, 2:38 a.m. EDT*)
- **U.S. Department of State**
 - FEMA has requested basic supplies and baby-related commodities from Canada (*DOS Update, September 1, 2017, 10:32 p.m. EDT*)
- **U.S. Department of the Interior (DOI)**
 - One Quick Response Team operational in Galveston and one awaiting assignment in Houston; four additional en route
 - United States Geological Survey (USGS) coordinating an Interagency Agreement to develop inundation mapping, once high water mark and peak streamflow information can be collected and processed (*DOI Update, September 2, 2017, 12:34 a.m. EDT*)
- **U.S. Department of Defense**
 - US Northern Command (USNORTHCOM):
 - NORTHCOM's top operational focus is SAR activities, particularly in Beaumont, TX; there remains a high demand for existing deployed SAR, high water vehicles, and boats to support operations
 - Operations in support of general population evacuations continue in Beaumont, TX
 - Synchronizing activities to position DOD forces to respond to mission assignments from FEMA and the State of Texas, and are looking ahead to response options for Tropical Storm Irma
 - US Transportation Command (USTRANSCOM):
 - TRANSCOM, in conjunction with Texas National Guard and FEMA, are positioned at Bush Intercontinental Airport to deploy a Disaster Assistance Staging Facility (DASF) for Aeromedical Evacuation; DASF will support the care and movement of up to 8,000 patients from the greater Houston-Galveston area
 - Defense Logistics Agency (DLA):

- Supporting the US Coast Guard with 45,000 gallons of jet-fuel daily at Ellington Field to support their SAR missions
- Mission Assignment (MA) for Subsistence issued: 18,470,112 meals to be issued between September 1-10 (**including initial delivery of 452,248 on September 1**) and 1,521,000 liters of water to be issued starting September 3
- 575 personal flotation devices delivered to Houston Reliant Park on August 31
- **DLA conducting market research for 450 temporary pumps for delivery to Texas A&M**
- Civil Air Patrol (CAP):
 - Civil Air Patrol (Texas Wing) flew 10 sorties in the vicinity of Corpus Christi, TX; photo imagery now available and expect to fly an additional 20 photo imagery sorties to meet requests from FEMA Geographical Information System (GIS) and TX EOC
 - CAP (TX Wing) will be moving base of operations to Joint Reserve Base Ellington to be closer to the most heavily affected area (*DOD Update, September 2, 2017, 12:38 a.m. EDT*)



Federal Declaration Map: (01 September 2017, 1700 EST)

FEMA-4332-DR-TX & 3382-EM-LA



Data Layer/Map Description:
This map displays the types of assistance that have been designated for selected areas in the State of Texas and Louisiana.

Declared_County

Designated Counties

- IAPAAB Individual & Public Assistance (Cat. A & B)
- PAB Public Assistance program (Category B)

NOTE:

Declared Counties in Texas, update taken from Amendment No. 2, August 30, 2017. There are a total of 29 counties declared for IAPA (B) and 4 counties declared for PA (B).

Declared Counties in Louisiana, update taken from Amendment No. 1, August 31, 2017. There are a total of 16 Counties declared for PA (B).

Data Sources:
FEMA, ESRI;

Map Created by: Geospatial Information System Specialist - HQ

Initial Map Creation: (01 September 2017, 1700 EDT)

Coordinate System: WGS 1984 World Mercator

Federal Force Laydown Map

(As of September 1, 2017
2:00 EDT)

OTHER SUPPORT / SERVICES

(Not shown on map)

FEMA: Nat'l EMS Contract Support: 200 ground ambulances, 25 RW, 29 FW aircraft. Surge Capacity Force (245 Denton PMC, 334 Anniston)

ESF-13: 1122 In theater, **514** in transit, **1060** QRT FLEO, **277** Support personnel

TSA: 402 Surge Capacity Force personnel; **DOD:** FW air: C-5, C-17, C-130. RW air: SAR, Heavy Lift, Medium Lift and Medivac assets. High Water Vehicles. AAV, 1,63 (Title 10) personnel, **1638** DoD mission partners.

USACE: 130 temporary power personnel, 12 debris SME, 2 Infrastructure Assessment SME, 1 temp housing SME

USCG: 38 RW, 12 FW aircraft, 73 rescue boats, 1,469 (including local), 76 National Strike Force, 6 Offshore Cutters

DOT MARAD: Ready Reserve Force ships

NPPD: CS&C with FAA on UAVs

DNDO: Mobile Radiation Portal Monitors, **GSA:** 2 Teams-Public Building Services inspections

FAA: FRA activated Emergency Relief Docket

ATF, DEA, BOP, ICE, FBI, BIA, USCG: Mobile Command Vehicles

USACE, NOAA, USCG: Aids to Navigation (assets pre-staged)

USDA: APHIS; FNS; FSIS

CBP: 13 RW, 8 FW aircraft, 51 boats, 739 personnel

National Guard: 67 aircraft, 17,928 personnel

USGS: 4 High Water Mark Surveys

DOI: 90 boats, 34 UAS on standby

SAN ANTONIO

(Branch, Staging Area)

FEMA: R-V IMAT, 52 FEMA staff, 2 US&R w/ HEPP (5) and MRP (13)

DOD: FSA at Kelly AFB

TSA: 0 VIPR Personnel

HHS: EMTF (1 AMBUS, 1 Type II Staging Site, 2 FOGs, 5 Air Ambulances); 1 TCCT

CAP: 150 personnel (Incident Command Post)

RANDOLPH AFB / SEGUIN, TX

FEMA: ISB, MERS Assets, 2 MCOVs (91 FEMA staff)

DLA: Expeditionary Distribution to manage/ship trailers (Seguin ISB)

DENTON (Region VI HQ)

FEMA: Personnel Mobilization Center (133 staff, 579 responders), RRCC (164 FEMA and ESF personnel), NPSC, FEMA Corps 20, MERS Detachment (15 MERS staff)

EPA: Pre-staged responders

COLLEGE STATION (US&R ISB)

FEMA: FSARCG, US&R IST, US&R HEPP, MERS Assets, 35 staff

USDA: 4 ESF-4 IMTs

DOI: 9 pilots, 8 boats, and 18 personnel

AUSTIN (TX State EOC, IOF)

FEMA: 638 Responders, National IMAT West, 3 Regional IMATs, FEMA Corps, MERS Assets, 3 MCOV

HHS: 1 DMORT

CAP: 21 aircraft, 170 personnel

VICTORIA

FEMA: MERS Assets

BEEVILLE

FEMA: 6 MCOV

DALLAS / FORT WORTH

FEMA: Distribution Center, 12 MCOVs (+1 inbound), 71 staff, FEMA Corps

TSA: 35 NDOs moving to Houston Hobby (HOU on 9/2/17), 5 K9 teams

HHS: ESF-8 Mob Center, 1 IRCT, 8 DMAT, 1 DMORT Assessment Team, 1 RDF, 3 MHT, 0 SATs, 6FMS, 1 Mobilization team, 1 NVRT, 3MHT

EPA: N-IMAT deployed

BEAUMONT/PORT ARTHUR

FEMA: Responders

CBP: 7 helicopters; 3 fixed wing aircraft

USCG: 30 shallow boat teams, 6 boat skiff, 5 air boat, Coast Guard Marine Safety Unit Port Arthur

HHS: EMTF (1 MMU - Type I, 1 MMU - Type III, 1 TFL, 2 AMBUSs, 2 ASTs, 2 M-ISTs)

CAMP BEAUREGARD

FEMA: ISB (29 staff)

BATON ROUGE (LA STATE EOC)

FEMA: R-VI IMAT 1, MERS Assets (16 FEMA staff)

HHS: IRCT-F, 1 DMAT, 1 RDF, 2 FMS teams/caches

NEW ORLEANS

USCG: 10 helicopter, 6 cutters

KATY

FEMA: 10 Responders, US&R base of operations with Blue IST, federal search & rescue coordination group, 6 Type 1 TFs, 8 Type 3 TFs, 13 water rescue teams, 7 HEPP

Law Enforcement Responders

HOUSTON/GALVESTON

FEMA: MERS Assets, 10 US&R w/ HEPP, R-VII IMAT, N-IMAT East 1, 150 staff, 4 US&R TFs (Galveston)

ESF-13: Law Enforcement Training Camp

TSA: 25 NDOs and 0 VIPR Teams, 5 canine teams, 2 TSST teams

HHS: NRG Stadium Staging, 1 FMS, 1 RDF, 1 TCCT, 7 DMAT, 1 MIST, 1 MMU, 1 RDF, 1 MHT, 1 FMS

USCG: 23 helicopters, 13 boats and 5 teams conducting SAR, 6 Cutters (Includes Galveston)

NOAA: SSC

EPA: 4 OSC teams, 4 air monitoring teams, ASPECT aircraft

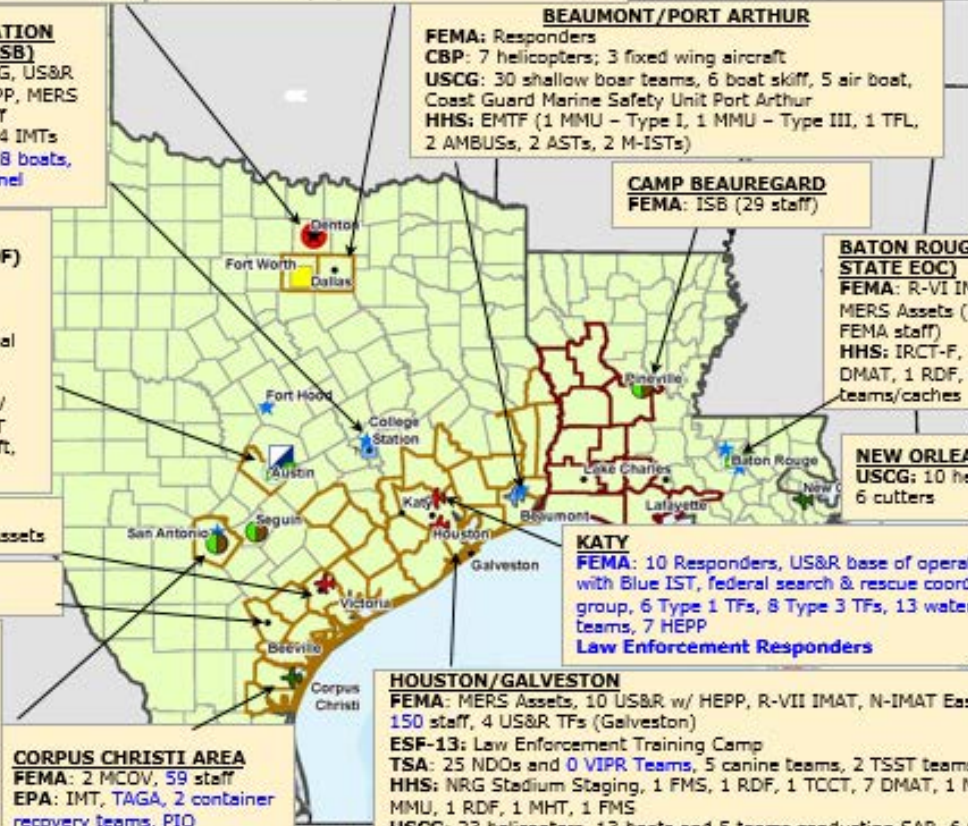
CORPUS CHRISTI AREA

FEMA: 2 MCOV, 59 staff

EPA: IMT, TAGA, 2 container recovery teams, PIO

USCG: 2 helicopter, 3 planes, 3 cutters

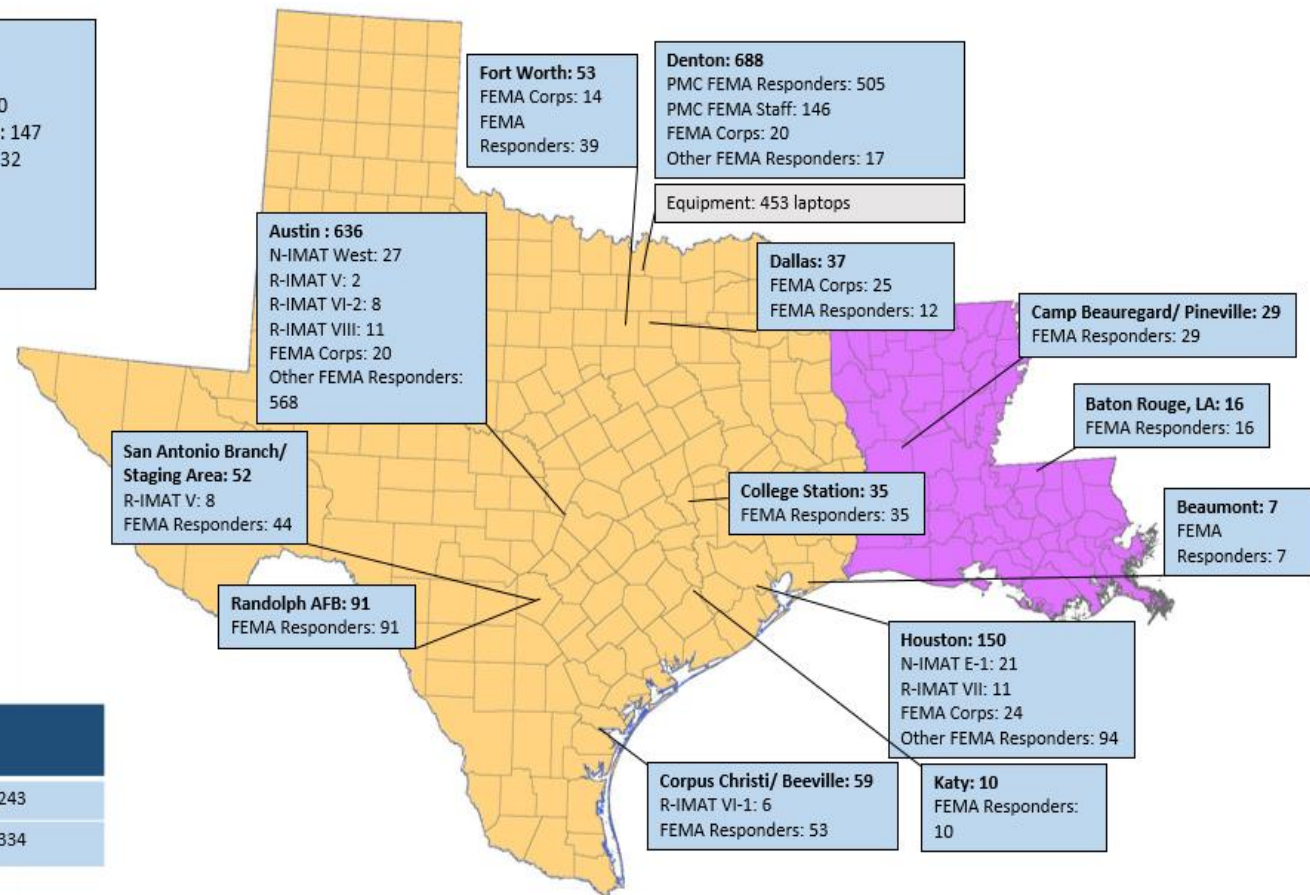
NOAA: SSC



Hurricane Harvey – FEMA Responder Laydown (As of Sept 2 2017 12:02 a.m. EDT)

Total FEMA Supporting Harvey:

Responders on the Ground: 1847
 Other FEMA Staff Supporting : 2050
 CDP supporting SCF mobilization: 147
 EMI supporting AS mobilization: 32
 Other Distribution Centers: 22
 RRCC Staff: 177
 NRCC Staff: 280
 NPSC Staff: 1392



Surge Capacity Force

Denton/Dallas	243
Anniston, AL – SCF	334